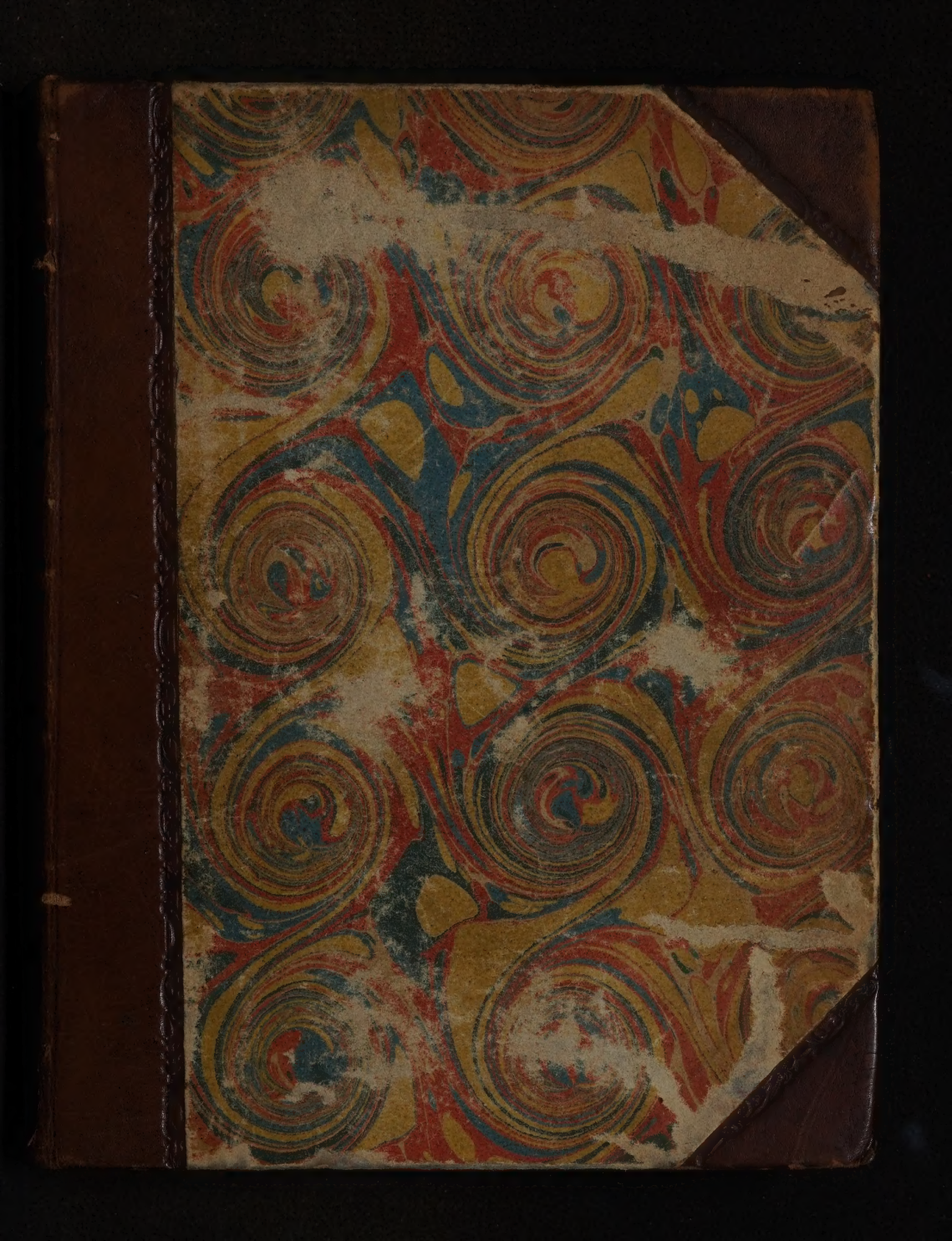

BLUNDEVILL'S

HORSEMANSHIP

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1609

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Pt 2 Pa chs ff. 555 & 60
Pt 4 Ia chs ff. 80 & 85

# The foure chiefeſt Offices belonging to *Horſemanſhip*:

That is to ſay,

*The office of the Breeder, of the Rider*, of the Keeper, and of the Ferrer. In the firſt part whereof is declared, the order of breeding of horſes: In the ſecond, how to breake them, and to make them horſes of ſeruice; Containing the whole art of Riding lately ſet forth, and now newly corrected, and amended by the Author, as well touching the true vſe of the hand and muſroll, as the turne of the Horſe. Thirdly, how to diet them, as well when they reſt, as when they trauel by the way. Fourthly, to what diſeaſes they be ſubiect, together with the cauſes of ſuch diſeaſes, the ſignes how to know them, and finally how to cure the ſame.

*Whereto are added diuers medicines, not heretofore printed.*

Which books are not onely painfully collected out of a number of Authors, but alſo orderly diſpoſed *and applyed to the vſe of this our Countrey. By Maſter* Blundeuill *of Newton Flotman in Norffolke.*

Imprinted at London by *Humfrey Lownes*, for the Company of the Stationers. 1609.

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# To the Right Honorable and his singular good Lord, the Lord *Robert Dudley*, Earle *of Leicester, Baron of Denbigh, Knight of the honorable order of the Garter, Maister of the Queenes Maiesties horses, and one of her Highnesse priuie Councell*, Thomas Blundeuill *wisheth perfect felicitie.*

FTER that I had put forth the Art of Riding, & saw how thankfully it pleased, not only your Honor, but also the most part of the gentlemē of this Realme, to accept the same: I was so much encouraged thereby, as I sought to make the sayd Booke more perfect, by adding thereunto three other Bookes: whereof the first should treate of the breeding of horses: the second of their diet, to preserue them long in health: and the third of their diseases, declaring therewithall the causes, signes, & cures of the same. Which bookes how necessarie they be, & how meet they are to accompany the Art of Riding, the matter it selfe (being well handled) would euidently shewe. For then it should bee a perfect worke, compre-

hend the foure chiefeſt Offices belonging to Horſemanſhip, that is to ſay: The office of the Breeder, of the Rider or Breaker, of the Keeper, and of the Ferrer. For as touching the Bitmaker and Sadler their offices, the firſt is indifferentlie well declared alreadie in the Art of Riding: and the Sadler his office, ſhall be taught hereafter in another little Booke of Additions, which I intend God willing, to ioine to this volume, briefly comprehending all the precepts of a later writer, now being your Honors moſt excellent Rider, called maiſter *Claudio Corte*: not onely touching that office, but alſo touching diuers other offices before recited. Which Booke ſhall ſupply to all the wants of ſuch neceſſarie things, as either *Griſon* in his Booke, or I perhaps haue negligently omitted. And truely, your Honour deſerueth no little praiſe for procuring ſo ſingular a man into this realme: for beſides his perfection in Riding, he is ſo well learned, wiſe, courteous, and modeſt withall, as his acquaintance, companie, and friendſhippe ought to bee right deare vnto al ciuill Gentlemen, and ſpecially to thoſe that delight in horſmāſhip. But now to returne vnto my purpoſe, for that I ſawe it lay not in me to performe this worke, ſo as it might anſwere euerie mans expectation, and ſpecially of

ſuch

ſuch as are more readie to finde faults, than to amend them. I did almoſt repent me of mine enterpriſe and good deſire: and the rather for that I had no one certaine Author to followe, that either wrote of theſe matters to the full, or in ſuch order as did ſatisfie my minde; but ſhould bee driuen to deale with a great number of Authors, whoſe ſayings and experiences, togither with mine owne ſmall knowledge gotten by trauayling in forreine countries, I muſt not onely orderly diſpoſe, but alſo apply the ſame to the vſe of this our countrey. Which thing being more laborious (than ſom perhaps take it) I had clean giuen it ouer, if your good Lordſhip had not been; by whom I was ſo much hearted, as I could not chuſe but take the ſame in hand, & to go through withall ſo well as I could. And therefore if any man receiueth any commoditie thereby (as I doubt not but he ſhall, if he wil vouchſafe to read all that I haue written, from the beginning to the ending) he ſhall haue moſt cauſe to be thankefull to your Honor for the ſame. And I beleeue your thankes and praiſe ſhould be ſo much the more, if it would pleaſe your Honour to bee a meane that the Queenes Highneſſe may not only cauſe ſuch ſtatutes as were made in her noble Father & deare Brothers time (both of good memorie)

touching the breeding of Horſes vpon cõmons to be put in executiõ: but alſo that al ſuch parks within this realme, as be in her highneſſe handes, and meet for that purpoſe, might not wholly be employed to the keeping of Deere (which is altogether a pleaſure without profite) but partly to the neceſſary breeding of Horſes for ſeruice; whereof, this Realme of all others at this inſtant hath greeteſt need. The lacke of which, if any inuation ſhould chance (which GOD defende) would quickly appeare (I feare me) to the great peril & danger of this her highnes Realme. And her Maieſtie giuing this good example, I doubt not, but that the moſt part of the Noble men and Gentlemen of this Realme, hauing Parkes or groundes impaled meet for ſuch vſe, would follow the ſame. And to the intent that no couetouſnes might hinder ſo good an act: I would wiſh the couetous mind & deſire of al men to be brideled by a law & diſcipline, wherby it would be prouided, that not only a ſufficiẽt number of able Horſes may be bred within this Realme: but alſo that the ſame Horſes may be broken, kept, maintained & exerciſed accordingly. *Monſieur de l'Angeay* in his Booke of warre, would haue no man to keep a hacknie or eaſie horſe to ride on himſelfe: vnleſſe he kept alſo a Horſe meete

for

for ſeruice in the field. Which thing, I feare me, would not pleaſe vs Engliſh men at all, which of late daies are more giuen to priuate eaſe and ſingular commoditie, than to a wealth publike or common profite. Notwithſtanding, if there were a good lawe (as I ſayd before) made, as well for the breeding, as exerciſing of great Horſes and Geldings meet for ſeruice; and the ſame ſtraightly executed by vncorrupted Officers, which in mine opinion would be skilful Surueiours for the breeds, and expert Muſter maiſters for the horſes of ſeruice; and alſo that ſuch ſurueyes be made twiſe a yeare at the leaſt, and that the Muſters of the horſes of ſeruice be takē throughout the whole Realme foure times in a yeare, that is to ſay quarterly, and all in one day, for the auoiding of falſe Muſters: I beleeue that in ſhort ſpace, we ſhould not onely haue plentie of good horſes, but alſo that the Gentlemen of this Realme would ſo farre paſſe the Frenchmen & al other Nations in this exerciſe, as they now excell vs: whereby this Realme ſhould bee of ſuch force, as our enemies would alwayes be afraid to attēpt any enterpriſe againſt vs. Wherfore me thinkes, your Honor cannot by any one way deſerue more prayſe, or better gratifie all true Engliſh hearts, than by ſeeking to bring to

passe so needfull a thing as this is: whereunto because I knowe your Lordshippe to be of your owne good nature and disposition so readie and prone, as no man more: I leaue therefore to trouble your Honour any further, praying God long to prosper the same.

*Alwayes prest to serue your Lordship,*

THOMAS BLVNDEVILL.

## A short Preamble, declaring in what points the knowledge of a Horse-breeder chiefly consisteth, whereon dependeth the order of this booke.

WHoso is desirous, & therwith able to haue a good race or breede of horses (for to haue skil in this matter, without good wil, & ability to execute the same, would litle preuail) ought first to know whither his ground be meet for that purpose or not, and how to seuer the same accordingly. Secondly, it behoueth him to knowe the diuers kinds of Horses and Mares, to the intent that he may prouide himselfe of such as are most worthie to be kept, & wil thriue best in his ground. Thirdly, how to vse them when he hath them, aswell at, and before the time of ingendring, as after that the mares haue conceiued and foled. And also how to vse their offspring, aswell during the foleage, as at their full age: so as they may redound to his most cõmodity, and with least labor & charge. Of which three generall points, with what order I treat in this Booke, the contents of the Chapters, hereafter following, doe plainely declare.

### The contents of the Chapters.


WHich grounds are meet for races and which be not. Also how such grounds ought to be diuided or seuered, & to what ende such diuision serueth. Chap. 1

Of the diuers kinds of Horses & Mares, according to the Countries from whence they come, and which be best. chap. 2

Of the Turkie horse,

Of the horse of Barbarie.


Of

Of the horses that come from the Iles of Sardinia and Corsica.
Of the Neapolitane, or Courser of Naples.
Of the Jennet of Spaine.
Of the Hungarian.
Of the high Almaine.
Of the Flanders horse.
Of the Frizeland horse.
Of the Sweathland horse.
Of the Irish Hobby.
A comparison of the races aboue rehearsed, as touching the Climates vnder which they be bred, and which of them wil thriue best here in England: and are most meet to serue euery breeders sundry purpose or intent. chap. 3
How to chose Stallions and Mares meet for breede, and of what age they ought to be. And finally how the Studs ought to be tame and not wilde. chap. 4
At what time of the yeare it is best for Horses & Mares to engender. And in what sort they ought to bee put together. And how to know when a mare desireth the horse. Also how many Mares one Stallion is able to couer in one yeare. And finally, when the Stallions should be removed from them. chap. 5
What order is to be obserued touching the couering of Mares, when the Stallions doe not run with thē in the pastures, but are kept in the stables: and how the same stallions shoulde bee dieted. Also at what time of the day the mares ought then to be couered. And finally, how to know whether they haue cōceiued or not. chap. 6
How to make your mares to cōceiue either horsefoles, or mare foles, and of what colour you list to haue your self. chap. 7
Whether mares should be forced to abide the horse, though they haue no lust, or not. And how to make horse and mare, hauing no lust, to haue a lust to engender. And how to abate their lust if need require. chap. 8
Which mares should be couered euery yeare, & which not. And how to doe, that those mares which you would haue to beare euerie yeare, shall not go barren. chap. 9
How mares should be vsed after they haue cōceiued, & are with fole,

fole, & what cauſeth thē to caſt their foles before their time. 10
How to helpe a mare that is in danger at the time of her foling, how you ſhal cauſe hir to expell her ſecundine or clean. cha. 11
How to make a mare to caſt hir fole that is not worthy to bee bred, or for ſome other needfull cauſe. chap. 12
How mares ſhould be vſed after they haue foled. Alſo how long the foles ſhould ſucke. And how they ought to be vſed during their foleage. And how to harden their houes. cha. 13
How to know of what ſtature, making, and diſpoſition the foles when they are new foled will be, whē they come to age. cha. 14
Of the growth as well of marecolts as horſecolts. And how to know which will continue in goodnes, and liue longeſt. chap. 15
When, and how coltes ſhould bee weaned from their dammes: and how they ought to bee ſeuered according to their kindes and ages. chap. 16
Of the geloing of coltes, and for what cauſe they be gelt: alſo at what age, & in what time of the yeare they ought to be gelt. 17
At what age, and in what time of the yeare it is beſt taking vp of coltes to breake them, and how they ought at their firſt haltering to be vſed. chap. 18
How and at what age a colts mouth ſhould bee cut, or certaine of his teeth drawn, when the bit for fault thereof cannot haue his true reſting place. chap. 19
Of the culling out of refuſe mares and coltes: and alſo of thoſe that ſhould be reſerued for the maintenance of the Studde or ſtocke. chap. 20

Thus ends the Contents of the Chapters following.

# THE BREEDING OF HORSES.

What things are to be cõsidered in those grounds that should be appointed to the breeding of Horses Also how such grounds ought *to bee diuided, and to what ende such diuision serueth. Chap. 1.*

AND first, as touching the ground, two things are to be considered, that is, the quantitie and qualitie. The quantitie for two respects. First, to the intent it bee not charged with more cattell than it is able to beare: for the Cattell not being sufficiently fed cannot prosper. The second respect is, for that the greater the ground is, the more partitions are needfull, partly for change of pasture sake: for according vnto the olde proverbe, Change of Pasture makes fatte Calues. And such partitions would bee made with high Pale, Raile, or else deepe ditch, and very thicke quickset. For Horses, Mares, and wild Coltes, are not so easily kept in, as other Cattell is. But chiefly such partitions are needfull, as well for the Stallions to runne euerie one seuerally by himselfe, together with his owne Mares, during the time of ingendring, as also for the Coltes when weaning time comes, to bee severed from their dammes: of which two points wee shall speake heereafter in their due place more at large. Moreouer, by such partitions, besides the commoditie of the grasse and hate, that shall be preserued thereby for Winter store, the ground it selfe being perhaps before that time, verie ample, wast and wilde, and thereby inclining the Cattell to be of the like nature, shall bee brought to a more formalitie, and so the beastes themselues shall be made the more domestical and familiar. And the rather, if they be handled and made tame in their youth: whereof we shal talke hereafter

more

more at large. Notwithstanding I would not haue the ground so straitned with partitions, but so as they may haue sufficient scope to run and trauell to and fro therin for their liuing. For as too much labor, leanneſſe and pouertie, depriueth them of luſt to ingender: euen ſo ouermuch reſt and fatneſſe letteth conception and cauſeth a dangerous foling. Wherfore I would wiſh the mares to be kept in a meane eſtate, vntill they haue foled, & then to be beſt feede, to the intent that they may haue abundance of milke in their dugges: which matter ſhall be talked of hereafter more at full in his proper place.

But now to appoint how many acres of ground will ſerue a mare and her offſpring vntil they are mēt to be broken, I think it not needful, ſith the goodneſſe of the groūd muſt rule that matter, and partly the diſcretion of the owner, who by experience ought to know his owne ground beſt: for all grounds be not of like fertilitie. Neither do I thinke that any owner is ſo ignorant, but that he knoweth that an horſe or a mare is a greater feder than any other kind of cattell, and therefore had nēde to haue greater allowance. Yet conſidering that the horſe biteth neerer the ground, than any other cattell (the ſhēpe and the conie onely excepted) whereby hee gathereth more feede out of one acre of ground, than any other beaſt can do almoſt out of an acre and an halfe: me thinks that a third part more than will ſerue a Cow and her offſpring, ſhuld alſo fēd a mare and hir offſpring, ſo that they be well prouided for in Winter ſeaſon. For at hard meate they be too hard for all other cattell, by reaſon they haue ſharper teeth, and do both chaw and ſwallow downe their meat with quicker ſpēd. And therefore of Winter meate they hadde nēd to haue double allowance. And ſuch winter meat for mares and coltes would be verie good and ſwēt haie, and well ſtacked vp in the drieſt and warmeſt places of thoſe groundes, whereas they ſhould bee wintered. Nigh vnto which ſtackes would bee built houſes mēt to harbour as well the mares with their foles, as the weanlings (but ſeuerally by themſelues) in time of ſnow and ſuch like ſtormie and cold weather: or elſe to auoid that coſt and charge of building, the haie may be layed vpon houels made with great forked poſtes and ſtrong rafters, in ſuch ſort as the

cattell

cattle may both stand and lye dry vnderneath the same, within which houels may be placed either standing or hanging racks at such heigth, as the foles together with their dammes may reach vnto the haie that shal be cast therein. And if such houels were inclosed with high hedge or hurdle, they should bee so much the warmer, and defende the cattel the better from the colde winde. Nigh vnto which houels or houses, let there be alwayes one pasture alwaies kept vntouched and not fed on vntil Shrouetide, betwixt the which time and the midst of Maie is alwayes most dãger of hũger bain. Thus hauing talked sufficiently as touching the quantity and diuision of the ground, let vs also speak somewhat of the quality thereof. The qualitie chiefly consisteth in foure points. The first is, to haue plenty of short & sweete grasse for common feede, and also of long and ranke grasse as well for haie, as for the mares that giue sucke. The second is, to lacke no good water and freshsprings. The third, to haue drie laier. The fourth, to haue shade and shelter, either of trees, or of high bushes to defend the Sunne, the winde and stormie weather. And the drier, the harder vnder foot, and the higher that such grounde is, the better: yea, and it is as very needfull that some part thereof might be craggy and stonie (so it bee not barren of grasse) and specially for the colts to run in, when they be weaned from their dammes. For to trauell to and fro in such grounds for their liuing, shall make them to haue strong legs, and hard houes.

By this meanes you may perceiue, that neither ranke, marrish, colde, or wet groundes bee méete for the purpose: for such kindes of grounds, partly for lacke of sweet and firme fode, the grasse whereof being ranke, sower and waterish: and partly for lacke of drie laier, most commonly do bring forth no other but slowe, heauie, dull, grosse headed, side bellied, and gowtie legged Jades. And therefore I would wish him that would haue a good race, to forsée that his ground be indowed with such properties as are before rehearsed.

Of

## Of the diuers kindes of Horses and Mares, according to the Countries from whence they come, and which be best. Chap. 2.

I Meane not here to treate of all the kindes of Horses that be in the world: for that were an infinite worke, and neuer attempted heretofore by any writer that I could read. For as Oppianus sayth, there bee as many kinds of Horses, as there be diuers countries & nations. And to say the truth, it would be to small purpose. For what should it auaile you to heare, vnlesse it were for nouelties sake, ỹ in some countries there be horses no bigger thã Rams, & in some countries, horses be made like Unicornes, in som countries againe, Mares doe conceiue with ỹ Western winde, without ỹ help of any Stallion, whose Coltes do not liue aboue three yeares. Wherefore leauing all such strange kinds apart, I will onely talke of the most worthy, and specially of such as haue beene known of late daies by good experience, to prosper very well in this land, and be not vnknowne to the most part of the Gentlemen of this Realme: which kinds be these heere following. The Turkie, the Barbarian, the Sardinian, the Napolitan, ỹ Jennet of Spaine, ỹ Hungarian, the high Almaine, ỹ Friezland Horse, the Flanders Horse, & the Irish Hobbie. Of which kinds, whilest I speake, I must needs also make some mention of the best kinds that haue been either in Asia, Affrike, or Europe, frõ whence these be descended, though perhaps more barrtardly thã I would wishe, and all for lacke of that industrie and diligence which hath been vsed by our forefathers in times past in breeding them, insomuch as wee can assure our selues in this our age of no certaine race: yea it sufficeth now to beléeue the seller that saith, the horse is of such a countrey or race, and therewith bee somewhat faire to the eye, and then all is good enough, though he be neuer so starke a Jade.

Of

## Of the Turkie Horse.

BVt now beginning first with the Turk, because he cõmeth furthest of, me thinketh it were not amisse to cõsider, that as Turky it selfe is of long time since become a great Empire extẽding very far into al ỹ three parts of ỹ world aboue said, cõprehending diuers kingdoms & countries, & yet altogether is cõmonly called by the name of Turky: euen so, the horses that come from any of the Turks dominions, or frontiers of his next neighbors, be called Turky horses: & therefore I thinke it good here to declare vnto you the opinions of the old writers, touching the races that haue bẽn in those countries, now subiect to the great Turke or thereabout, to learne thereby (if it may be) whether those that we call Turkie horses, be so indeed or not, & of which of those races they séeme most likely to descende. And first we will begin with the chiefe races of Asia, which be the Parthians, the Medes ỹ Armenians, the Cappadocians, & many others. The Parthiãs (saith Absirtus) be great of stature, bolde, couragious, and sure of footmanship. Vigetius also saith, that they bee very well reined, and haue an easie ambling pase. But the Medes excell them in comlinesse of shape. The Armenians & Cappadocians, do descend of the Parthians, and be like them in al points: sauing that they are somwhat more heauy headed. The horses of Greece, as Absirtus saith, haue good legs, great bodies, comely heads, and bee of an high stature, and very wel made forward, but not backward, because they are pin buttocked, notwithstãding they be very swift and of a bold courage. But of al the races in Greece, both ỹ horses and mares of Thessalia, for their beawtie, bignesse, bountie, & courage, of all Authors are most celebrated. For which cause Xerxes at his cõming into Greece made a running of horses in Chariots to be proclaimed onely in Thessalia, because he would haue his own horses to run with the best horses in Greece. Iulius Cæsar also being Dictatour of Rome, knowing the courage of these horses, was the first that ordained them as a spectacle before the people, to fight with wild bulles, and to kill them. The Pellei, ans and Magnesians, are also very wel commended. The Pellei-

ans bee so named of a towne in Thessalia, called Pella. And the Magnesians of Magnesia, a region of Macedonia, next adioining to Thessalia. The Epirotes be frowarde & disobediēt to ẏ bit: notwithstanding, Paulus Iouius making mention of the last great wars which the Venetians had, not only with ẏ Turks, but also in a maner with al christendom, giueth ẏ Epirotes great prayse for their swiftnesse and nimblenes. Insomuch as the Venetians (as he saith) esteemed their horses more, and waged their Riders better than any other horsemen that serued them at that time. But the horses of Thracia, which is now ẏ chiefest part of Turkie, in the which Constantinople the head city & seat of the great Turk standeth, be accounted worse than all the rest. For the most part of the writers do describe them after this sort. The Thracians be foule & euill fashioned, hauing rough bodies, great shoulders, and rising backs like vnto camels, crooked legges & go rolling and vnseemly, as well in their pase as running. Notwithstanding, the horses that I haue seene come from Turky, as wel into Italie, as hither into England, be indifferent faire to ẏ eye, though not very great nor strongly made, yet very light & swift in their running, and of great courage, and therefore seeme to descend of the Grecian race, before described by Absirtus. But their trauelling pase is neither amble, racke, nor trot; but a certaine kinde of easie traine. Albeit for the most part they be euill mouthed, by reason that in Turky they bee neuer ridden (as I haue learned) vntil they be ten or twelue yéers old, wherby they ware so headstrōg, as they be not easily brought to make a good stop: yea, if when you will run him at his setting forth, you say but this word (Braie) vnto him, hee will neuer leaue running so long as his breath will serue him, shunning nothing that shall stand in his way, if he may go ouer the same by any meanes possible: for they be of nature verie couragious, and wil do more by gentle meanes then by stripes or great threatnings, for that maketh them more desperate, and bringeth them clean out of order. Thus much of the Turke.

## Of the Horse of Barbarie.

The Barbarian is a horse that coms out of Barbaria, a Country in Affrike, cōtaining vnder ẏ the two regiōs of Mauritania,

tania, lying against Spaine, whereof the one is called Mauritania Tingitana: & the other is called Mauritania Cesariensis. It cõtaineth also the country of Numidia, and that part which is called Affrica minor, that is to say, the lesser Affricke, so that Barbaria stretcheth verie far. And there be many good races within the same, and in the frontires of the regions therabout, as the Mauritanians, the Libians, Cerenians, the Numidians, & manie others. The Mauritanians be much commended of the writers, not onely for their good shape, their swiftnes in running, but also for that they bee excellently well breathed, and thereby are both able to maintaine a very long cariere, and also to abide any kind of labour and trauell: yea, and besides that, they will abide the sight and roaring of a lion, whereof there is great store and plentie in that countrie. Next vnto these are the Libians which be of like goodnesse, and of like shape, saving that the Libians be stronger made, longer bodied, thicker ribbed, & broader brested, and of all horses, as Aelianus saith, they do require lesse tending and keeping. For their maisters in that countrie when they travell by the way, do neither wipe their legs, currie them, nor litter them, nor pare their hoofes, and as soone as their iourney is done, they turne them forth to the pasture, and make no more ado. Againe, the mares of this kind or race, as the Authors write, be so delighted with musicke, as the heardman or keeper, with the sound of a pipe, may lead them whither he wil himselfe. The Cerenians (as Absirtus saith) be great of stature, and haue small and gant bellies, they be swift in running, and sure of footmanship, and in labour good at length, for which causes they were much vsed in the old time to run for wagers in chariots. But those horses which we commonly call Barbarians, do come out of the king of Tunis land, out of Massilia and Numidia, which for the most part be but little horses, but therewith very swift, and able to make a very long cariere, which is the cause why we esteeme them so much. And it should seeme by Vigetius, that this race came first from Spaine: who affirmeth them to be verie swift in running, and meete for the saddle. Thus I end with the races of Barbarie.

## Of the Horses of *Sardinia* and *Corsica*.

THe Horses that come out of the Iles of Sardinia & Corsica, as Volateranus saith, haue short bodies, & be verie bold and couragious, and vnquiet in their pase: for they be of so fierce and hote cholericke complexion, and therewith so much vsed to running in their country, as they will stand still on no ground. And therefore this kind of Horse requireth a discréete and patient rider, who must not be ouer hastie in correcting him, for feare of marring him altogether.

## Of the courser of *Naples*.

THe Napolitan, which we cõmonly cal a courser of Naples, is a trim horse, being both comely and strongly made, and of so much goodnesse, of so gentle a nature, and of so high a courage as any Horse is, of what countrie soeuer he be. Hee is easily knowne from all other Horses, by his no lesse cleane, than strong making, his limmes are so well proportioned in euerie point: and partly by his portlinesse in his gate, but chiefly by his long slender head, the nether part whereof, that is to say, from ỹ eyes downeward, for the most part is also somewhat bending like a Hawkes beake, which maketh him to reine with the better grace. And yet the Italians doe both write and say, that these courlers be nothing so strong now, as they haue bẽne in times past: partly perhaps for that like industrie of late daies hath not been vsed in breeding them, as in times past, and partly for that nature doth decaie euerie day more and more, as wel in man as in beast. But howsoeuer they be, in mine opinion, their gentle nature and docilitie, their comely shape, their strẽgth, their courage, their sure footmanship, their well reining, their lofty pase, their cleane trotting, their strong galloping, & their swift running well considered (all which things they haue in manner by nature) they excell numbers of other races, euen so farre as the faire Greihoundes the fowle Mastiffe curres.

## Of the Iennet of *Spaine*.

THe Iennet of Spaine is finely made, both head, bodie, and legs, & verie seemely, to the eye, sauing that his buttocks be some-

somewhat slender, and for his fine making, lightnesse, and swiftnesse withall, hee is very much estéemed, and especially of noble men, as Camerarius saith, which Oppianus also affirmeth saying: that the Jennet in swiftnesse passeth the Parthians, and all other horses whatsoeuer they be, euen so far as the Egle exceedeth all the birds in the aire, and as the Dolphin passeth all the fishes in the sea: but therewith he saith that they be but small of stature, of small strength, and of small courage, all which things séem to agrée very well with those Jennets that bee brought hither into England, vnlesse it be the last point. For I haue heard some of ỹ Spaniards to set such praise on their Jennets courage, as they haue not letted to report, that they haue caried their riders out of the field, I cannot tel how many miles, after ỹ Jennets themselues haue bén shot clean through the bodies with Harquebushes. Which report I haue heard to be true by diuers of our own souldiers: which if it be true indéede, it dooth better counteruaile their smal stature and little strength, which is manifest to al mẽ eies that do behold them, and yet Absirtus séemeth to be of a cõtrarie opinion: who writeth of them in this sort. The Horses of Spaine (saith he) be great of stature, hauing fine heads, and right vp bodies, very well compact together in all partes, sauing that their buttocks be somwhat too slender. They be strong and able to endure great labor, and commonly they be neither too fat nor yet too leane, and in their trauell they neede not to be quickened with the spurre, and yet they be nothing meet to run, or to passe a cariere, because their houes be not good. And as from their fole age vnto their full age, they be verie obedient & tractable, so from thence forth they ware to be curst and froward. Al which things perhaps might be truly sayd of the Spanish Horse, in Absirtus time: for the most part of his sayings are verified by good experience euẽ in these our daies, vnlesse it be as touching his greatnes of stature and strẽgth, which may be decaied since his time. And perhaps those horses whereof he writeth, were of another climate thã ours, which may cause much alteration both in stature and strength. For Albertus saith ỹ those horses which are bred betwixt ỹ third clime, and the end of the first, are alwaies of greatest stature, & specially those that are bred in Spaine. Notwithstan-

withstanding, those that be bred in the seuenth climate, which is more towards the North, though they be not fully so great, yet they be stronger, and also will endure much more labour. The pase of the Jennet is neither trot nor amble, but a comely kind of going like the Turke. Thus much of the Jennet.

## Of the Hungarian.

THe Hungarian by Vigetius is described thus. The Hungarian saith he, hath a great & hooked head, and his eies stand almost without his head, his nostrils are narrow, and his tawes broad, his neck is long and rough, with a mane hanging down beneath his knées, he hath a large bulk, a right back, a long bush taile, his legs be strong, his pasternes small, and his hoofes full and broad, his guttes are hollowe, and al his body is ful of emptie corners, his buttockes are not halfe filled with fat, neither doe the brawnes or his muscles appeare, of stature hee is more in length than height, and therewith somewhat side bellied, his bones are also great, he is rather leane than fat, which leanneſſe is so answerable to the other parts of his bodie, as the due proportion obserued in his deformitie, maketh the same to be a beautie. And as touching his inward disposition, hee is, as Vigetius sayth, both temperate and wise, and able to abide great labour, cold and hunger, and therefore verie mèet for the warre. Camerarius also saith, that they be verie swift, and if they be prouoked by some iniurie, they will both bite and strike, otherwise not. Their pase is a hard trot.

## Of the Almaine Horse.

THe Almaine is cõmonly a great horse, and though not finely, yet very strongly made, and therefore more mète for the shock than to passe a carriere, or to make a swift manage, because they be verie grosse and heauy, yet by industrie they are made lighter behinde than before: for their riders do vse in their managing to make them to turne alwaies with their hinder partes, & not with their fore parts: like Jacke anapes, when he is made to to come ouer the chaine, whereby they kéepe their Horses heade alwaies vpon the enimy. The disposition of this horse (his heauy

mould-

mould considered) is not euill, for he is very tractable and will labour indifferently well by the waie, but his pase for the most part is a verie hard trot.

## Of the Flanders Horse.

The Flanders Horse in his shape disposition, and pase, differeth in a manner nothing from ỳ Almaine horse: saving that for the most part he is of a greater stature, and more puissant. The mares also of Flanders be of a great stature, strong, long, large, faire and fruitful, and besides that, will endure great labour, as is wel séene, for that the Flemmings doe vse none other draught, but with those mares in their wagons, in the which I haue seene two or three Mares to go lightly away with such a burthen, as is almost incredible.

## Of the Frizeland Horse.

The Frizeland Horse is no very great horse, but rather of a meane stature, being therwith strong & wel compackt together, and hath very good legs. And Vegetius saith, that ỳ Frizeland horses be verie swift in running, and able to maintaine a long course. And indéed I haue séene of them my self that would make a good cariere, and manage verie wel, and also do the Corvettie so truely, as any Jennet of Spain. But then the disposition of this horse is so diuelish, so stubborne, & so froward, as vnlesse the rider which first breaketh him be verie bold, and therwith circumspect to correct him in time, hee shall neuer bring him to any good: for he wil do nothing without stripes, which also being giuen out of time, will make him so restiefe, that neither faire meanes nor foule meanes, will euer winne him from that vice againe. The pase of this horse is a good comely trot.

## Of the Sweathland Horse.

The Sweacian or Sweathland Horse, so far as I can coniecture, by those that the king his Embassadours haue of late daies brought with them into this Realme, whereof I am sure there be diuerse here yet remaining, is no great or strong horse, but of a meane stature and strength, and I feare mee scant well

conditioned. And I am induced to thinke so the rather, for that they be most commõly pied, and of two sundry colours: or their legs at the least be all white, euen vp to the belly, their bodies being of another colour, which as Grison saith, is a signe of small force: albeit the Gentlemen in that coũtry delight much to haue their horses of diuers colours, and to weare as it were diuerse liueries. Besides that, many of them be wall eied, which is also a token of a shrewd & stubborne disposition. Notwithstanding, I haue séene of them with good handling, to make an indifferent good manage, whereby I take them to be docible, & also because they come out of a colde countrie, I beléeue they wil abide much hardnesse.

## Of the Irish Hobby.

THe Irish Hobbie is a prettie fine Horse, hauing a good head & a bodie indifferently well proportioned, sauing that many of them be slender & pin buttocked, they be tender mouthed, nimble, light, pleasant and apt to be taught, and for the most part they be amblers, and therefore very mét for the saddle, & to trauell by the way: yea, and the Irish men both with darts, & with light spears, do vse to skirmish with them in the field. And many of them do prone to that vse verie wel, by means they be so light and swift: notwithstanding I take them to be very nesh & tender to kéep, and also to be somwhat skittish and feareful partly perhaps by nature, and partly for lack of good breaking at the first.

A comparison of the races aboue rehearsed, as touching the climates vnder which they be bred, and which of them will thriue best here in *England, and are most meete to serue euerie Breeders purpose and intent. Cap. 3.*

HItherto we haue talked of diuerse kindes of Horses and Mares, and therewith declared to you their shapes, natures, and disposition. Now it resteth, that wee briefly compare these kindes togither, that we may not onely know those that bee most méete to brééde within this Realme in generall, but also that the desire and intent of euerie brééder in particular may be satisfied. For some man perchance would haue

haue a breed of great trotting horses mete for the warre, and to serue in the field. Some other againe would haue a breed of ambling Horses of a meane stature, for to iourney and to trauel by the way. Some perhaps would haue againe a race of swift runners to runne for wagers, or to gallop the Bucke, or to serue for such like exercises of pleasure. But the plaine countryman would perchance haue a breed onely for draught or burthen. And first you shal vnderstand, that generally those horses & mares will thriue best in this Realme, that be bred vnder a climate being of the like temperature that this our clime is, or at the least not much differing from the same. Wherefore naturally me thinkes the Turke, the Jennet of Spaine, the Barbarian, and the Sardinian, being bredde in farre hotter countries than this is, should not be able to endure the cold of this countrie: nor to like heere so well as there, from whence they come. For though I haue seene them to breede heere, and their offspring to grow to a perfect stature, and to bee like in shape to their Sires and Dammes yet for the most part they be but nesh and tender, and do require more attendance and fine keeping, than others doe. And yet I will not denie, but that in continuance of time, their nature may be altered, and such tendernesse may weare away well inough, and specially those that come out of Iland, soner than the others, because they are more able to endure both heat & cold, and their nature doth agree the better with this country, being also an Iland. The Napolitan although he be bred vnder a hotter climat than ours is, yet that region is very temperate of it self: and therwith so fruitful, as it is called the Garden, or Paradise of Italy: and the Horses there bredde, be of so strong and healthful complexion, as they will not quaile whersoeuer they go: and that they prosper so wel heere in this land, as in any other forraine country, & not onely the Queenes Maiesties race, but also other mens races, and specially Sir Nicholas Arnolds Race doth well testifie, from whence I haue seene so faire Colts to come, and to proue so well in their doings, as euer I sawe in the realme of Naples: who for his industrie and diligence shewed in that behalfe, as he is worthy to be much commended and praised, so I wish, that all Gentlemen, hauing abilitie, would

do

do the like: so should they neither lacke good horses to serue their Country in time of nede, nor yet to serue themselues in their owne affaires. Now as touching the rest of the races before mẽtioned, as the Hungarian, the high Almaine, the Flanders horse, the Frizeland Horse, and the Irish Hobbie: daily experience teacheth, that they doe proue verie well here, because either they come out of colder countries then this is, or at ỳ least not out of much hotter: and som of them do proue better here thã at home, and specially such as come from sowre grasse & wet grounds, as the Flanders Horse and Mare, both which doe ware here to be finer limmed cleaner made, and therwith lighter and more nimble, than they be at home. But now to aunswere the diuerse intents of the breeders, I would wish him that seeketh to haue a race of good Horses meet to serue in the field, to get a Napolitan Stallion, if it bee possible: if not, let him take the high Almaine, the Hungarian, the Flanders or the Frizeland Horse, so that he be of a conuenient stature, well proportioned, and meet for the purpose. What things are requisite in a Stallion, shall bee declared hereafter in his place, and let those Mares that shall bee put to such Stallions, bee of an highe stature, strongly made, large and faire, and haue a trotting pase, as the Mares of Flanders, and some of our owne Mares be: for it is not meet for diuers respects that Horses of seruice should amble. But if any man seeke to haue a race of fine ambling Horses to trauel by the way, then I would wish his Stallion either to be a fair Jennet of Spaine, or at the least a Bastard Jennet, or else a faire Irish ambling Hobbie, and the Mare to be also either a bastard Jennet, or doe here within this realme, hauing an ambling pase, or else some other of our ambling Mares, so that she be faire and wel proportioned. And if any man desire to haue swift runners, let him choose a Horse of Barbarie, or a Turke to bee his Stallion, & let the Mares which he shall put vnto him be like of stature and making vnto him, so nigh as may be, for most commonly such Sire and Damme such Colt. And sith all writers doe so much praise the horse of Barbarie, not onely for his swiftnesse in running, but also for his hardnesse, in that hee needeth small attendance and keeping, and will not surfet vpon euerie little sweat

And by your leaue, you shall seldome see any of them amble well.

or

or colde, as some others do: he therefore that delighteth in hunting and hawking, had neede as mee thinkes, to choose this Horse above all others to be his Stallion, to the intent hee may have such Coltes of him, as will bee able to continue in such extreame exercises, as to gallop the bucke, or followe a long winged Hawke. Either of which exercises, killeth yéerely in this realme many a good Gelding. But now to content the countriman his desire, which only séeketh to bréed horses for draught, or burthen, where should I wish him to prouide himselfe of Mares and Stallions better than here in England, whereas he may easily find a number of strong Jades more méete for that purpose, than for the saddle, and al for lack of good order of bréeding, which if it might be once obserued in this realme, I beléeue there wold be so good and so faire horses bred héere, as in any place in Christendom. But as for the cart horse, so that he be great of stature, déepe ribbed, side bellied, and haue strong legs and good hoofes: & therwithall wil stoop to his worke, & lay sure hold on the ground with his féete, and stoutly pull at a pinch, it maketh no matter how fowle or euill fauoured he be. Notwithstanding, I haue knowne some carriers that goe with cartes, to bee so exquisite in their choice of horses, as vnlesse they had béene as comely to the eye as good in their worke, they would not buy thē, insomuch as I haue séene sometime drawing in their cartes better proportioned horses, than I haue knowne to be finely kept in stables, as iewels for the saddle. The horse that is méete for the carte, may serue also for the burthen, because hee is strong and able to beare much, but the packeman desireth besides strength, three other things in his horse. First, that he be a good traueller: secondly, that his hoofes be so good as he néed not to be often shodde: thirdly, that he be no vnreasonable féeder, for the auoyding of expences, for which cause I think our packemen here in England, do most commonly go with Geldings, which lacking the feruent heate that stoned horses haue, cannot consume so much meat as they do, but chiefly perhaps because the Geldings are more easie to rule by the way than horses. Thus hauing sufficiently talked of diuers kinds of horses and mares, and which be méetest for this realme, as well in general, as to serue diuers vses in particular,

I will now shew you how to chose a Stallion or Mare meet for breed.

How to choose Stallions and Mares meet for generation, and of what age they ought to be. Also how to know their ages aswell by their teeth, as otherwise. Chap. 4.

SIch it is naturally given to euerie beast for the most part to ingender with his like, aswel in conditions as in shape of bodie, it is verie requisit therefore for him that would haue a good race, to be verie circumspect in chusing the first Stallions & Mares, from whom he would haue his race to descend, to the intent he may reape thereof both pleasure and profite, and not bestow his cost and labour in vaine. In chusing then a Stallion, three things (as me thinkes) are chiefly to bee considered, that is, his beautie, his goodnesse, and his age. And first, as touching his beauty, it consisteth only in colour and shape: of which two things, because I haue already according to Grisons opinion sufficienily treated in the booke of the Art of riding, I shal not neede therefore now to trouble you with many words, but only to make as it were a breefe recitall of the same. Of all colours then these be the best, the browne Bay, ỹ dapple Gray, the bright Bay, the Rone, ỹ white Liard the pure Black with a white star in his forehead. And in any wise let the Stallion be all of one colour, and that verie cleare and bright, & not pied, or of diuers coulours, albeit to haue some white or black marke in place conuenient, is very beautiful, as to haue a white starre in his forehead, or the outermost parts of his body blacke, as the tippes of his eares, his maine, or his taile, or else some of his fét to be white, according as his coulour doth most properly require, of which things we haue talked at large in the Book of riding. Now as touching his shape it would be in this sort: Let him haue a short & slender head, a wide mouth, & wide nostrills, slender lawes, great eies, and blacke, bolting outward, and not hollow inward, short eares & sharp pointed like a mouse, a neck rather long than short, great towards his breast, slender towards his head, the creast whereof would bee rising in the middes, and therewith neither too thicke, nor too thin, hauing a crispe mane,

and

and hanging naturally on the right side, a broade breast, and full of apparant muscles, or brawnes of flesh, also broad shoulders, a large bulke, & gant bellie, a streight and sharp pointed withers, a short and plaine backe, great round buttockes, a long and bushie taile, a yard and stones of mean assise, one stone not hanging sider than another, but trussed vp round together, large thighes and long hanches behinde, strong legs and great ioints, as well before as behinde, short pasternes, with long fewterlockes, also round, smoth, blacke, hard, hollow, and sounding houes: and finally, let his whole body together, haue roundnesse according to his length, and be in al points so well proportioned, as he may seeme both high of stature, strong of limme, and also liuely to the eye. Thus much of his shape, and now of his goodnes. His goodnesse may be partly naturall, and partly artificiall, neither of which can be throughly knowne but by his doings. His naturall goodesse chiefly consisteth in his healthfulnesse of bodie, in aboundance of good seede, in his strength, agilitie, swiftnesse, good disposition, and aptnesse to be taught: yea, and in his pase, galloping, running, bearing of his head and eares, all which things, may be also much holpen by art. But to reine well, to beare his head steddily, to be ready of turne, and light of stop, to handle his feete orderly, to keepe his ground, and to obey his riders well at all assaies: procedeth rather of Art than of Nature: which artificiall goodnesse, whether he hath or not, the book of riding doth plainely teach you howe to iudge. Albeit for a Stallio which should chiefly serue to couer Mares, such artificial goodnesse is not so materiall as the naturall good thinges before mentioned, amongst the which there is one chiefe point, and yet cannot perfectly be knowne, vnlesse you might see him to couer a Mare, and that is to wete, whether his seede be good or not: which at that time may very well be knowne in this sort. Take of it betwixt your thumbe and your finger, or in a locke of woll, and if in your feeling and towling of the woll it seemeth to bee firme, fast, and slimie, it is good, but if it be ouer liquid or waterish, it is naught: and if the Horse be slow in couering, or doth it not with a liuely spirit & courage, or hath but one stone, or great warts growing on his stones, or haue naturally any white speck

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in any of his eyes, hee is not méet to bee a Stallion: for all the Coltes that he shall beget wil haue the like defects. Wherfore so nigh as you can, let your Stallion be without al faults. Now as touching the age of the Stallió, although most men in these our dayes make no matter therof, because he may get foles vntil he be xx. or xxx. yéres old: yea and so long as he liueth, so that he be holpen: and therfore in most places of this Realme, they appoint no horses to that vse, but such as be verie olde, and therfore perhaps both lame & blind. Yet the men in ỹ olde time made a great matter thereof, & allowed no Stallion to be very good but from v. yeares to xiiii. affirming that as one perfect thing doth bring forth another perfect, so ỹ which is vnperfect bringeth forth his like. And as a Horse is accounted vnperfect, vntil he be v. yéres olde, for that his ioynts before that time bee not throughly knit, neither is he growne to his full strength: so that at xiiii. yéres he beginneth againe to ware vnperfect, because that nature in him by that time is sore decayed, in so much as decrepite age, & death it selfe by nature, doth then shortly followe after. Albeit I will not deny, but that good kéeping, and a strong complexion may cause one horse to continue in lust and courage much longer thã another. For Albertus writeth that he knew a souldiour, which serued in the field on a horse that was lxx. yéars old, and yet was accounted an able Horse. Niphus also saith, that the Emperor Ferdinandus the first, had in his stable a Horse that was lxx. yéres old. And I my selfe haue séene Stallions that haue béene xx. yéres old and aboue, that haue gotten very faire colts to the eie. And yet I beléeue not like in perfection to those that the same Stallion might haue gotten in his more lusty age: for the coltes of old Stallions for the most part, bee dull and slowe, and haue tender hoofes, and are more subiect to diseases and sorfeites than others. Wherefore I would wishe all you that would haue a perfect race, not to admit any horse to be your Stallion, that is, as I said before, vnder v. or much aboue xiiii. vnlesse he be very lusty and strong, and therewith bee verie haile of body and lim. And whilest I talke heere of the horses age, it is méete that I shewe you also how to knowe the same. Some séeke to know a horses age in this sort, they pull his skinne with their hands frõ

his

his flesh, holding it so a prety while togither, and then let it go againe, marking whether the skinne returneth immediatly to his place or not, without leauing any signe or wrinkle where it was touched, for then they iudge ỹ Horse to be young. But if the skin will not fall down quickly againe of his owne accord, they take him to be old, and to lacke that naturall heat and warme bloud, which should nourish his outward parts. But most men vse to iudge a horses age by his teeth, taking that to be the most certaine way of knowledge, specially vntill he be ful seuen yeares old and vpward: for euerie horse when he is two yéres old, doth cast his two former téeth, aswell aboue as beneath: and euerie yeare after, vntill he be six yeares old, he faileth not to cast other two in like mãner. Then in the first year, those which be first cast be closed, but in the seauenth yeare all his téeth bee fully closed, so as the marke goeth cleane out, whereby a man should iudge his age. Notwithstanding, after the horse beginneth to enter into old age, his temples wil wax hollow, and the hair of his browes, hore and white, his téeth also wil be greater and thicker in substance, fowler in colour, and one standing further out or higher thã another, which they do not so long as the horse is yong, but stand euen and round togither. Thus much of the Stalliõ. Now let vs speak somwhat of the Mare, which would be also good in hir doings, beautiful and yong. For as Absirtus saith, the Mare that should be for brééde would be of a comely stature, and broad set, as well behinde as before, and well knit togither, hauing a slender head, and a large body, so as shee may bee sightly to the eye, and not to be lesse than three yeares olde, nor much more thã ten. Notwithstanding, some write that it maketh no matter though she be couered and do cõceiue immediatly after that she be two yeares old and vpward, so that she be full three years old at her foling. For the female kinde in all beastes, as they be colder of nature, so they come sooner to their perfection than the Male kinde, and likewise decay sooner: wherefore some hold opiniõ, that their foling after ten yéars of age is vnprofitable, affirming such colts to be naturally dull and slow, albeit I haue séen mares of 20. yeare old and aboue, that haue brought forth very faire and liuely colts to the eye: yea Aristotle sayth that a mare

may

may beare foles all hir life long. And also that she doth liue lõger than a horse, who as he saith, may liue vntil he be xxtiij. but the Mare may liue till she be xl. affirming her to be inclined to the act of generation as much as any beast liuing. Notwithstanding I would wish you to kéep for bréed no Mare, that is much aboue ten yeares, vnlesse you haue good experience of her colts, and bé wel assured of her continuance in courage and lustinesse. And in any wise let your bréeding mares which you kéep for studdes, be made so tame and domesticall as may be, so shall you not onely easily driue them and remoue them from place to place, but reap som commoditie of their worke: which if it be moderate, it cãnot hurt their teaming, whereas if they should be wild, they would be verie combrous to kéep, yea and many times through their rashnesse destroy the foles in their bellies, neither can you bring thẽ to the Horse, nor take their foles from them, when you would weane them, without great trouble. At what age it is best to tame them, we shall shew you hereafter in his proper place.

## At what time of the year it is best for Horses and Mares to ingender, & in what sort they ought to be put together. And how to know when a Mare desireth the Horse. Also how many Mares one Stallion is able to couer in one yeare. Finally, when the Stallions should bee remooued from them. Chap. 5.

AFter ỹ wé haue taught you how to chuse both Stallion & Mare méet for bréde, it is requisite that we shewe you now in what time of the year it is best to put them together that they may ingender, and what order is to be obserued therein. Most writers doe affirme that the best time is the spring, or as Palladius saith, from the 22. of March, vntil the 22. of June. Because the Mare going a full yeare, or at the least 11. moneches and ten dayes, shal by this meanes fole in such time of the yeare as grasse is most plentifull, whereby she shal haue the more aboundance of milke to feed hir fole, and the aire shal be so temperate, as the fole shall neither be parched with the hot sun, nor pinched with cold weather. But forasmuch as our mares for the most part here in England, goe not with fole aboue eleuen moneches, and also for that the coldnesse of the countrie will not

suffer

sufferr the gralle to spring and growe so sone here as in Italy, or such like hot countries, I would not wish the mares to be couered before the beginning of May, so shall the foles fall in Aprill, before which moneth there groweth but little grasse. Again, the Mares of themselues before May will haue but little lust to the horse, for fault of full bit and warme weather, which should ingender lust. And yet as I saide before according to Aristotle, ther is no kinde of beast more inclined to that acte than the horse and mare, insomuch as if they may not be suffred to ingender when lust prouokes them, they will run mad. It is easie to know when they lust, by their inordinate running and flinging here and there and that as some write, not toward the East or West, but most commonly toward the South or North, setting the tail, bolt vpright. Againe, one mare will woe another, and they wil pisse often. The time then of the year meet for generation being come, it is requisit that these two beasts be put together, which you may do diuerse maner of wates. The first and best way, and specially for him that hath many mares and stallions, is to put euerie one of his Stallions by himselfe (being before rested and well fed for the purpose) into a seuerall pasture full of grasse, and wel fenced with high pale or raile, as I saide before in the first chapter, in which pastures would be either some good shade and shelter, to defend them from the Sunne and raine, or else some house or houel made of purpose, and so to let them run there from the beginning of May, vntil the midst of June, during which time, you may turne into euerie one of those stallions so many mares as he is well able to couer, which abilitie is to bee measured by his youth, strength, and lustinesse. For if he be yong and lustie, hee may couer ix. or x. Mares verie well, and if he be old and feeble, he had need to couer the fewer: for to couer many is a great feebling to the horse, albeit in Italy, to a young horse, they will not let to appoint xii. or xv. Mares. And Aristotle saith, that a Horse may couer xxx. Mares in one yeare. Also Herodotus writeth, ỹ the king of Babylon, hauing (besides his Horses of seruice) eight hundreth Stallions, did appoint euerie yeare vnto those Stallions sixteene thousand mares, so that euery stallion hadde for his singular share xx. mares. Yea and somelet not to write, that in

Syria, there was somtime a race of 30. thousand mares, to whom were appointed but three hundred Stallions: so that every horse had to couer an hundred mares. Whereby it seemeth, that Horses in times past haue been of a farre stronger nature than they be now in these our daies. But in any wise, when ye let the stallion and the Mares thus run together, haue alwayes a good eye to the fence that it be strong & sure, for feare that none of your own stallions or strange horses breake in, to disturbe any of them: for they wil fight together in such time most cruelly. Neither is ther any beast more iealous of his mate, than the Horse is of his wiues (if it bee lawfull so to tearme them) insomuch as hee will not suffer them to feed out of his sight, nor to stray one from another, but will keepe them alwaies togither, and nigh vnto himself: which running and keeping together, breedeth such a mutual loue betwixt them, as thereby they are on both sides the more inclined to generation. And the Mares by this meanes doe more naturally, more speedily, and also more easily conceiue, than if they should be serued out of a stable: for there many times, of ten that be serued, fiue do not take: of which kind of seruing, I will speak in the next Chapter following. Notwithstanding, so soone as the mares haue all conceiued, which you shall know by such meanes as shall be shewed you hereafter, I would wish you to remoone the stallions from them, and not to suffer them to run with the mares all the peare as some doe, for that is not good, for two considerations. For first you should lose the vse of your horse which being after couering time somewhat rested, and well meated, may serue you in your other affaires: secondly, it will bee very daungerous for the mares that bee with fole: for Aristotle sayth, there be three kindes of beasts more lecherous than all others: that is to say, the Mare, the Sowe, and the thirde I dare not name, for feare of offending: for whereas all other beastes when they be with yong, wil abstaine from the act of generation, these three kinds (as he saith) doe not refuse it euen in that time. And though the mares doe refuse it, as most commonly they will, whatsoeuer Aristotle saith, yet the horse perhaps when prouander pricketh him wil force them, and so perchance by striuing with them, make them to cast their foles: wherefore I can in no wise

wise consent that they should run al the yeare together, but only vntill such times as the mares haue conceiued. Thus much for great races, where as be many mares and stallions: for those that keepe but one stallion and a fewe mares, doe like better to haue their mares seuerally serued one after another, thã to run altogether with the stallion, affirming that by this meanes the stallion shall not beate himselfe so much, nor spend more séede vpon one Mare then vpon another: and for this purpose a very small portion of ground might serue to keepe the stallion, so that it be a battling ground, full of grasse, and well fenced with high pale, or raile, as some large Orchard or Pond-yarde, nigh vnto the mansion house: of which kinde of groundes, as I haue séene diuerse, so did I neuer sée any that pleased me better, than one which I sawe in Darbie shire, in a towne nigh vnto Darbie, called Marketon, whereas a verie honest Gentleman, and a good householder, named maister Monday dwelleth, who keepeth a good strong stallion, and halfe a dozen faire mares, whose colts doe proue verie well, whereof your Lordshippe hath one called Markam, so named according to the name of his olde master, master Thomas Markam of Olerton: which Horse as he is indifferent wel proportioned, so was he once made by Abraham, master Astleis man, as ready a horse in all points, as any was then about the Court. The péece of ground which I liked so well at this Gentlemans house, was a Pond-yard, enuironed round about with a high and strong pale, and also with a verie thicke quickset without the pale: ỹ quãtitie of which ground, the ponds deducted, is scant three acres, but the quality and goodnesse thereof is such, as it doth not only keepe his stallion all the Summer, that is to say, from the midst of Aprill vntill Halontide (before which time he doth not take him in, vnles it be betwirt whiles to worke him, as in haruest time, and so to put him forth againe) but also two milch kine, and xx. shéepe (as he saieth) all the yeare long, besides the féeding of his mares whiles they tarry with the stallion to be couered, whereof euerie one comming seuerallie, one after another, tarieth three daies with him at the least, & the be turned into a park which he hath hard by, the ground whereof is verie méet for that purpose: neither doth he bestowe any pro-

uander on his Stallion, during the couering time: for to say the truth, he is so full fed with swéet grasse, as he hath no néede therof. And in mine opinion, there lacketh nothing, but some little hoüell or house to be placed in some méet corner for the Stallion to shrowd himselfe therein in the heate of the day, and when it raineth: for the hote sunne, or piercing raine, doth greatly feeblish a horse backe. Thus much I thought good to write of this péece of ground, to the intent that euerie man minding to haue a race, might inclose a like péece of ground in quantitie at the least, though not altogether in qualitie, to kéepe his Stallion in the summer season, the commoditie whereof in short time will counteruaile the charges.

What order is to be obserued touching the couering of Mares, when the Stallions do not run with them in the pastures, but are kept in the stable. And how the same Stallions should be fed. Also at what time of the day the Mares ought then to be couered, and finally how to know whether they haue conceiued or not, Chap. 6.

BVt if ye haue no such seuerall grésid as is both able to féed your Stallion & Mares during the couering time, as also to kéepe them from breaking out: then you may kéep your Stallion still in the stable, & bring the mares thither to be couered, which is a more chargeable and troublous way of couering than ỳ other before mentioned. For first your stallion against that time must be well fed with swéet hay & prouander: yea rather during ỳ couering time with swéet grasse if it may be gotten, & his prouander as some write, would be either dried wheate, or dried pease mingled with weate bran, or else fitches, which be much praised of all authors to be giuẽ in that time. And now & then he must haue a good mash made of water and wheat meale, and that shall be to make him lustie. Also he may not be laboured by the space of six weéks or two months before, but suffered to rest, and yet I mean not to rest altogether without any kind of exercise, but rather to be ridden now and then moderatly to get him a stomach to his meate. For as ouermuch labor drieth vp his moistnesse, and maketh his spirites and

power

power féeble: so ouermuch rest and fatnes bréedeth superfluous humours, which on the other side will as much weaken him, by quenching his natural heate, and cause his séede to be colde and moist, which seldome or neuer taketh, or if it take, it ingēdreth rather semals than males, but moderate exercise preserueth his natural heat, and swéet nourishing foode increaseth good bloud, and causeth his séed to be perfect, that is to say, hot and moist, and in substance neither too much nor too little, too thick nor too thin, but in a meane, & that is best and will soonest take. The lesse he drinketh when he hath to couer any mare, the better: for if he drinke ouermuch, it will put his wind in ieopardie. Moreouer, behinde your stable, or else behind some other house not farre from your stable, would be som prettie close yard or court made of purpose into the which the mare would bee first brought, and that verie early in the morning when the Sunne riseth, or else in the Euening at the sunne going down. For those two times are thought by the writers most méet for generation, and will do the horse lesse hurt than to couer in the heat of the day. Albeit Aristotle saith, that the mare for her part is more desirous to be couered about the midday, because perhaps she being the colder beast of ý twaine, heat doth then most chiefly prouoke her lust. Well, the mare thē being thus brought in, ye may cause your horsekéeper to bring forth your stallion, who if he hath béene wel fed, and moderately exercised, as I said before, so soone as hee séeth and smelleth the mare, he will immediatly fetch thrée or foure saults, and bound aloft with all power for ioye, euen in your Horsekéepers hand, who must not be afraid, but rather ready to helpe the horse in his businesse, so soone as he shal leap the mare, by putting his yard with his hand into the right place, whereby the mare shall be the more spédily, the more easily, and also the more substantially serued, by meanes that the Horse shall spend no labour in vaine, nor waste any part of his séede. And after that the mare hath béen couered once, let your horsekéeper lead the Stallion a little aside, and walke him a while faire and softly behind som house or wal clean out of her sight to breach him. And when he is well breathed, bring him in againe, and let him couer the mare ý second time, and then lead him out againe, and so the third time

if ye will, continuing to do this euerie euening and morning the space of two or three daies, vntil you thinke that she be sped. Betwixt which times, see that your horse be wel rubbed and fed: and to the intent that the mare cast not out the séede which she receiueth, it shall not be amis in the end of euerie last couering, immediatly to bestow one pale of water on the reines of hir back, and to cast another into her taile, and that shal make her to hold. You shall know whether she hath conceiued or not, as Absirtus saith, best within ten dayes next following. For if you offer the horse againe at ten daies end, and she refuseth, it is an euident signe of her conception. Her cote also as Plinie sayth, of what colour soeuer she be, will shew more full and bright to the eye, immediatly after conception, than it did before.

*How to make your mares to conceiue either horse foles, or mare foles, and of what colour you list to haue your selfe. Chap. 7.*

BVt now, whilest we are about the couering of mares, me thinke it were not amisse, to shew you what prette meanes and sleights, men in the old time vsed, to haue colts of such kind and colour as they themselues haue desired. And first as touching the kind, Democritus affirmeth, that if ye tie the left stone of the Stallion with a threedden lace, or point, or such like thing, he shall beget a horse fole: & if ye tie the right stone, he shal beget a mare fole. And this rule (as he saith) is general to al other beasts. Affricanus also saith, that if you cause your horse to leap ỹ mare, when the wind bloweth in the North, he shal beget a horse fole, & if in the South, a mare fole. Againe some write, that if the mare be couered the third day before the ful Mone, she shal bring forth a horse fole, and if the third day after the ful Mone, a mare fole. And I take this to be a very good rule, and seldome to faile, and specially if the mare at that time haue lately foled. Againe, some hold opinion, that if the mare be couered within fiue or sixe daies after hir foling, and in the spring of the Mone, that she shal bring forth a horse fole, and the rather if the horse be suffered to smell hir, and to stand in hir sight somewhat before he couer her, which order, Maister Garret lieutenant of the Pensioners doth diligently

diligently obserue, when he causeth his mares to be couered, who affirmeth, that in obseruing this rule, hee neuer failed to haue a Horse colt at his pleasure, who I assure you is no lesse expert in breeding, chã skilfull in riding, and therwith so desirous to haue good horses, as he letteth not to hire a great deale of groũd, paying by the year forty pence for the acre, to fæde his Mares and Colts: in which his doing me thinks he deserues much to be cõmended. But to know what kind the mare hath conceiued the Authors write, that if the horse after hee hath couered the mare come down from hir backe on the right side, it is a signe that she is conceiued with a horsefole: and if on the left side, with a marefole. Now as touching the colour, they write that if the Stallion be clad wᵗ a couering of such colour, as you desire the fole to bee, at such time as he doth couer ẏ mare, you shal haue your desire. Some again write, that it is better to die or staine ẏ haire of the Stallion with such colour as you like best, and then to make him to continue in ẏ mares sight, whiles she burneth in lust, before he leape hir: to the intent (as I take it) that the impression may bee the more feruent. And as this saying is grounded of a good natural reason, so it may be proued by a most true ⁊ vnfeined exãple recited in the bible, in the 30 chap. of Genesis. Wheras you may read how Iacob, after that Labã his master ⁊ father in law, had giuen him in recompence of his seruice, al the blacke lambs and speckled kids, that should come of the ewes and gotes which he kept, by putting straked rods in the sight and face of the ewes, when they went to ram, ⁊ of the chẽ goates when they went to bucke, made all the offspring of Labans flocke to be blacke and spotted: whereby in short space he became as rich in cattell, as Laban his father in law. For truly at the time of conception all the powers of the beast are so open, and the matter it self so tender, as it is apt to receiue euerie light impression.

Whether Mares should be forced to abide the horse, though they haue no lust or not, and how to make both horse and mare, hauing no lust, to haue a lust to ingender. Also how to abate their lust if neede require. Chap. 8.

IF the mare will not suffer the horse to leape her, some haue vsed (as both Varro and Plinie writeth) to force her thereunto,

whether she wil or not, by tying her to a post, set vp in the midst of such a close yard or court as is talked of before, which thing is vsed euen at this present day at Tutberie, wheras the Queenes Mateslie hath a race. And though I know that some of them do conceiue, and prosper wel inough after it, yet I cannot praise it, because it is both dangerous, and also vnnaturall: for the act of generation ought to be with pleasure, and not with pain, neither doth that which is painfully conceiued, thriue for ỹ most part, so well as that which is conceiued with pleasure. Wherefore I would wish all men, rather to follow Camerarius aduise, which is not to force her: but to make her first to desire the horse, by putting a little stoned nag to her, to woe her foure or fiue daies, before you wold haue hir couered, which nag would be so fettered, as he may not couer her, although she would perchance incline vnto him: which when you perceiue she doth, remoue ỹ nag frō her, and put the Stallion vnto her: so shal she stand stil of hir own accord, and receiue the Stalliō the more willingly. But the readiest meanes to make a mare desire the horse, is (as Columella saith) to annoint the matrix with the iuice of a certain herbe called of him Scilla, & of Palladius, Squilla, which som of our Physicians do call a sea Onion, because it groweth as wel in the sea as on the land, and hath a head or rote like an Onion. It is very good also to rubbe her matrix with nettles, which as Rusius saith, will not onely cause the mare to suffer the horse to leape her, but also to ingender with him. Which otherwise manie times perhaps she cannot doe, for want of naturall heate in her matrix. That the nettle is a prouoker of venerie, it is not vnknowne to the plaine wiues of the countrie: which when ỹ hens will not lay, nor suffer to be troden, do vse to nettle their tailes, and that maketh them (as they say) to desire the cocke, and also to lay. Againe, Anatolius saith, that to annoint her matrix with hennes dung & Turpentine mingled together, wil marueilously prouoke hir lust. But if you se that your horse hath no lust to ingender, then make as though you wold driue away the mare from him, & that will make him more desirous of hir. It is good also to wipe the matrix of that mare which desireth the horse with a spunge, & to put that to the Stallions nose, ỹ sauor wherof

will

will prouoke his courage. Also the pesill of a Stagge being burned, and made into fine powder, and put into strong wine, will prouoke his courage, if his yard and stones be washed therwith. But I haue been taught by men of experience, ỳ if a good quãtitie of the powder aforesaid, together with these powders following, that is of Annisseedes, of a rot called Satirion, and of Basil, of each like quantitie, bee giuen the horse to drinke in a warme mash made of water and wheaten meale, the night before you would haue him to couer any mare: it will not onely prouoke his courage, but also make his sæd of such force, as it will holde & not quaile. And the lesse that either Horse or Mare driuketh whilest they attend to generation, the better it shall be for them: for ouer much drinke, will not onely make the sæd thin and waterie, and so as it shall not hold, but also as I saide before, make ỳ Horse pursie: yea, and put his winde in leopardy. But if you sée, that after the time of couering, the stallion continueth still ful of lust and courage, thẽ it shal be good to annoint his stones with a little sallet oile, & that will abate his courage, and the soner if you steepe a little lettise in the oyle somwhat before. The same medicine also will abate a mares courage, if her matrix bee annointed therewith. And som write, that the cutting of her mane doth abate hir courage. These medicines perhaps will offend the delicate eares of som persons, that are more nice then wise. But I trust, the discréet man wil not be offended to heare them: but rather learne discrétly to vse them as nede shall require. For I assure you, they were no soles that wrote thẽ, but learned, wise, and men of great experience.

*Which Mares should be couered euerie yeare, and which not. And how to doe, that those Mares that you would haue to beare euerie yeare, shall not go barren.*

Chap. 9.

PAlladius and Columella would haue those mares that bee verie beautifull and faire, and therewith haue not onely béene verie well horsed, but also haue horse soles sucking on them, not to bee couered euerie yeare, but euerie seconde yéere, or rather third year, to the intent that their soles may suck the longer time, and also be fed with the more pure milke. And

as

as for all other Mares, they would haue them to beare euerie yéere, and to be couered againe so soone as their foles are 5. or 6. daies old, so that they be in good lust, and not too poore. And to the intent, that none such should go barren, it shall be necessary not only to inforce them, by such waies as haue bẽn shewed you before, to the horse in the spring time, but also about Lammas or in the beginning of August, and to suffer a Stallion to run with them three weekes or a moneth, to the intent that if any of them chanceth not to conceiue at the first couering, they may now be serued. But be sure that som one of the mares be ready to be couered, when you turne the Stallion in to them, least perhaps he beat aswel those that be with fole as ỳ others, & so do more harm than good. And by using this order you shal be sure to kẽpe no Mare barren all the peare, vnlesse the mare be barren by means of some sickenesse. Wherof I shal treat hereafter when I come to the diseases of horses, & there shew you how to cure the same.

*How mares should be vsed after they haue conceiued and are with fole, and what causeth them to cast their foles before their time. Chap. 10.*

AFter that your mares haue conceiued, you must beware you labor them not ouermuch, and specially that they beare no heauie burdens, for feare of killing their foles in their bellies. Also you must se that whiles Sũmer lasteth, they go in a good pasture, not hauing ouer rãs gras, but short and swẽt, & that they lack no good water. And in winter when the grasse faileth, that they be fed with swẽt hay, & that they lie dry e and warm in some bushie close, wode, or grone, or else vnder som houell, but so as they be not shanted of rome, nor thronged vp together: for that is dangerous & may cause aborsemẽt, that is to say, to cast their foles before their time. Anatolius also saith, that the change of strange pasture or water will cause aborsement. Again, Rufsius saith, that if they chance to eate the mast of Terre trées, they shal be in danger of aborsement. Or if any of them be couered with an Asse after that she hath cõceiued by a horse, or chance to tread vpon a Wolfe, or where a Wolfe hath troden, it wil cause her to cast hir fole. Also all stinking sauours, as the snuffing of candles, or torches, or such like, will

cause

cause abortement, as some Authors write, aswel in mares, as in women. Wherfore al such things would be foreseene, and in any case keep your mares whilest they go with fole, neither too leane nor yet too fat, but in good plight: for if they be too lean, they wil either cast their foles, or else bring forth starueling. Again, if they be too fat, euerie place of their bodies wil be so filled, as the foles within their bellies cannot haue rome sufficient to grow, and to prosper: by meanes whereof, either ỹ foles shall be but little ones, or else the mares themselues shal be in great danger, at the time of their foling, by reason that their cõduits be ouermuch straighted with fat. And therfore the Scythians, which is a people of the North, vsed (as Aristotle writeth) moderatly to iourny, & to trauel their mares, after they were quickned, to ỹ intent that they might haue the easier foling. For truely, moderate labour and exercise at that time, must needs do them much good. But to trauell them immediatly vpon conception, or when they bee verie great & readie to fole, is dangerous. For the fruit of the wombe in all beasts, may wel be compared to the fruit of the apple tree, which at ỹ first blossoming, and also when it is through ripe, and mellow, wil be blown downe with euerie light wind: but in the middle time betwixt both, it cleaueth so fast vnto the bracches of the tree, as it will scant be throwen downe with cudgels.

*How to helpe a Mare that is in danger at the time of hir foling: and how you shall cause her to expell her secundine or cleane.* Chap. 11.

BVt if it so happen, that a mare by any mischaunce, bee in daunger at the time of her foling, then it is needefull to helpe her, causing one to holde her nostrils in a gentle maner, close in his hand, and so to stoppe hir breath, and it shal make her to fole with more ease, and also the soner, which is not verie painefull for any man to doe, forsomuch as the mare foleth standing, wherby he shal not need greatly to stoupe. Againe, if the secundine, which is the skinne wherein the fole is wrapped, doth not come all out naturally of the own accord, then vse this remedie. Take a good handful or two of Fenel, & boile it in water, then take halfe a pint of that, and another halfe pint of olde wine, and put thereunto a fourth part of oile, and mingle them altoge-

altogether ouer the fire, and being but luke warm, powre it into the mares nostrils, and hold her nostrils close with your hand, to keep it in a prette while after. And that shall force the secundine to come forth: which for the most part, both she & all other beasts doo immediatly eate and swallow vp againe into their bellies. Which thing the plain folkes of the country (if they can prevent it) will not suffer their milch kine to do, in their time of caluing, saying: that it will make them sicke and vnlustie. And truely I beléeue it dooth the mares no great good. Some authors write, that when the Mare dooth eate vp her secundine or clean (for so the plain folkes terme it) she snappeth away also with her téeth, a certain péece of flesh, growing like a figge vpon the foles forehead, called of the Greeks, & Latine, Hippomanes. Of the vertue whereof, in matters of loue, many monstrous tales, by many learned Authors are recited. Whereof I thinke it not good to make the vnlearned partners: and therefore I leaue to speake of it any further.

*How to make a mare to cast her fole that is not worthy to be bred, or for some other needfull cause. Chap 12.*

IF a fair mare in old time had béen couered with a foule roile, or had bin with fole out of season, or at such time perhaps as she must run for some great wager, then they would vse means to make hir cast hir fole before hir time, and that was don either by force of hand, or by medicin. For if the fole were so far growne that it had haire, they would cause one to thrust his hand into the mares wombe, and to take the fole by the head & to crush it in péces. And if it had no haire, then they would destroy it with medicines not néedfull here to be written. Notwithstanding, in mine opinion the surest way (if greater cause do not otherwise require) were to tarry till shee hath foled of her owne kind, and then to kill the fole.

How Mares should be vsed after they haue foled. Also how long the foles should sucke, and how they ought to be vsed during their fole-age, also how to harden their hooues. Chap. 13.

IT is néedfull immediatley after the Mares haue foled, or rather a weeke or a fortnight before they be ready to foale,

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to put them into the warmest, sweetest, and rankest pasture that you haue, to the intent they lying warme and drie, and faring well, may haue plentie of milke to fede their foles. For nothing doth hinder the growth of the foles more than colde, and penury. Moreouer Anatolius saith, that it is very necessary about two or three months after their foling, to chase them about the ground to and fro, or otherwise to exercise them with some moderate labour, to make their milke come down into their dugs. And to the intent that the foles may be faire & fat, all the writers with one consent would haue them to sucke two yeares, & specially if they be horse foles: yea, some would haue them to suck till they offer to couer their Dammes: and lesse than one year, though they be Mare foles, none that euer I could heare or read of doth allow. And yet here in England they will scant suffer them to suck fyue monethes, but will weane them before they be ful half a yeare old, which truely I cannot commend: for though many of them doe proue to be great of bone and tal of stature, yet the pith within is not firme nor sound, neither can they be so strong, so healthful, or liue so long, as those most commonly do, which suck a long time. For that sweet and most naturall moisture & nutriment, wherof they be depriued in their youth, will neuer bee gotten againe so long as they liue. Wherfore I wish those that seek to haue strong and healthful Colts, to let them sucke one year at the least. In old time, as it appeareth by Varro & Columella, they vsed for warmth sake to house both mares & foles, vntill their foles were ten daies olde, and then to put them forth into the pasture. And when the foles are fiue monthes olde, they vsed now and then to bring them into the house, & there would giue them ground barlie mingled with wheate branne, and such other soft kind of fode. And being a yeare old, they would giue them firmer prouander, as dried barley, and bran, continuing so to doe, vntill they were two yeares olde. All which time the colts also sucked, and chiefly they did this to make them domesticall and familiar, and partly to make them so fat and lustie, and partly again to acquaint them with all kinde of meates, but therewith they would touch them or handle them so litle as was possible, for feare of hindering their growth. And among the rest of their diligent cares, in bringing

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vp this necessarie beast, they had a speciall regard to his howfes, that they might be tough, firme & hard, and therfore whensoeuer they stood in the house, they would suffer no dung to remaine any while by them, for feare of burning their howfes. And if they saw they were any thing inclined to haue tender howfes, they would make an ointment of the eares of Earlike, of Swines greace, Goates greace, & brimstone that had not been tried in ỳ fire, and so annoint their hoofes therewith, both without & within, which ointment did make their howfes very tough and hard, and to that intent they would strowe stones vnder their feete, whereas they stode. Moreouer, when they fed abroad in the pasture, they would driue them vp to the highest and most stonie grounds, which as Rufsius saith, doth not onely harden their howfes, but also make them to haue strong legs, and to tread surely vpon the ground. But as touching the hardning of howfes, wee shall talke more thereof, when we come to treat of the diseases of Horses.

How to know of what stature, making, and disposition the foles when they are new foled will be, when they come to age.
Chap. 14.

THe foles that haue verie long legs, euen from their birth, doe proue most commonly to bee tall of stature: for the legges of all foure foted beastes, bee almost so long at the first day of their birth, as they wil be euer after. Again, those wil be both strongly & finely made, which in their very youth haue great bodies, & wel knit togither, little heads, blacke eies, short & sharp ears, broad nostrils, wide mouths, broad necks with good thick creasts, broad breastes, plaine backes, gant bellies, brawnie thighes, nimble knées, that wil easily bow in their going, strong legs, short pasterns, round, hard and hollow howfes so as they may sound againe when they tread vpon the ground, and the harder and the fuller they tread vpon the ground, the better howfes they seeme to haue. Now the signes of their dispositiõ and courage, as Varro saith, be these: to be liuely and stirring, not to be afraid of euerie noise, or sight, to run wantonlie before their fellowes, and to striue to be formost, also to offer to leape ouer euerie hedge & dike, or to go ouer a bridge, or to passe

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the water: againe, if they wil be quickly stirred, and therewith sone pacified, it is a signe that they wil be tractable, and easie to be broken in time to come.

## Of the growth aswell of Mare colts, as Horse colts, and how to know which will continue in goodnesse, and liue longest. Chap. 15.

I Think it good here also to let you vnderstād ẏ opiniōs of ẏ writers, touching the growth aswel of mare foles as horse foles: for although Horse foles be fashiond in their dams bellies, sooner thā ẏ mare foles, yet ẏ mare foles being once foled, arriue to their full growth of height and length in fiue yeares, whereas the horse foles bee not at their full growth of height and length, before they bee full fiue yéers olde: from which time forth, as Aristotle saith, till they bee ten yeares old they grow only in largenesse and thicknesse. And Absirtus saith, that those which haue white or balde faces, do not waxe olde so sone as others. Againe, the same Author saith, that those coltes which haue tender hoofes, do not cōtinue in their bigor and strength, aboue eight yeares after that they bee at their full growth of height & length, neither are they mēt any more to be iournied: because the crowns of their hoofes wil fall downe so lowe, as they shall scant be able to stand on their féete. But if they haue good hoofes, then they will continue in their bigor ten yéeres after their full growth and aboue. Moreouer, the said Author saith, those horses which haue from their youth vpward hard hoofes, will liue vntill they be eight and twentie, or nine & twenty yéeres olde, but they seldom arriue to thirtie: but those that haue soft hoofes do not liue aboue foure and twentie yéeres. But as touching the liues of horses we haue talked already sufficiently before in the fourth chapter.

## When and how Colts should be weaned from their Dammes. And how they should be seuered according to their kinds and ages. Chap. 16.

When your colts haue sucked 2. years or one year at the least, and specially if they be horse colts (for mare colts may suck a lesser time, according as you your selfe shal thinke it good to haue your mares coueredagaine

againe the next yeere following or not) the about shrouetide it is good (as some men write) three dayes before the full of the Moone to take them early, in the morning from their Dammes, and to shut them vp all that day and all that night without meat, in a house appointed for that purpose, & standing cleane out of their Dammes hearing. The next day in the morning to put them againe to their Dammes, and to let them sucke their bellies full: yea euen vntill they swel againe: that done, take them away for all adoe, and to keep them in the aforesaid house the space of fourteene dayes, nigh vnto which house would be some pretty sweet pasture reserued of purpose, to the intent that from the end of the fouretéene daies, vntill the moneth of May, (before which time there is little grasse growing) the colts may féede and also play themselues therein euerie faire day. But when May is once come, then put them forth into some good pasture, whereas they may haue plentie of short and swéet grasse: for ouer rank grasse will hurt their reines, and make them thicke necked. and in any case see that therewith they lie warme and drie and lacke no water, for if weanlings suffer either hunger, thirst, or cold, and specially in the first yeare when they mourne for their dammes, they will neuer prooue to be good, but will be small of stature, of small strength and full of diseases. But after that ỹ colts be two yéres old and vpward, and haue cléene forgotten their dams, I would wish them to runne in a large, hard, and hungrie ground, but so as with their trauelling and taking paines for their liuing, they may fill them full once in the day at the least, for feare of hindering their growth. Your colts being thus weaned and kept, shal proue to be light, nimble, harde, and strong horses, and to haue strong legges, and harde hoofes, and not to surfet of euery little colde, as those doe which be fed in Summer season with ranke grasse, and lie cold and wet in Winter. Moreouer, to the intent there may be no disorder amongst your coltes: see that ye seuer them according to their kindes and ages, that is to say: to put horse foles by themselues in one pasture, and mare foles by themselues in another pasture. Againe, put yearelings, two yearelings, and three yérelings, euery age by it selfe severally, so that not ỹ greater wrong the lesser: for among equals, is altogether

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loue and fellowship without any discord. Wherfore you sée that partitions as I sayd in the beginning of this booke, are so néedful in that ground which should be appointed for bréeding of horses, as nothing more.

## Of the gelding of Colts, and for what cause they be gelt, and also at what age, and in what time of the yeere they ought to be gelt. Chap. 17.

The colts that do naturally amble, or may easily be brought to it, either by trauerse, or else by hand with out trauerse (which in mine opinió is the better way) most men in this realm do more delight to haue thē gelt than stoned, for they loue not only to ride easily by the way, but also verie fast, and therewith to haue their horses so quiet, as they may be easily gouerned, which things are not commonly séen in stoned horses: for their abundant heat wil not suffer them to be so quiet, nor yet to labour so far in a day as Geldings may, because ỳ Gelding lacking his stones, hath no such hot blood in his bodie as he had before he lost them. Yea to be gelt (as some Authors write) is such a cooler, as it tameth both man and beast in their greatest madnesse, and cleane healeth them of that disease, when nothing else wil. Moreouer, Geldings doo not neigh so often nor so lowde as stoned horses do. For the which cause, the Sarmatians in all their secret enterprises and exploits, doo vse to serue vpon Geldings, and not vpon stoned horses. And also our light horsemen here in England do in like māner serue vpon Geldings in the warres, and for that cause they do not onely geld ambling colts, but also trotting coltes, which they thinke partly méete for that purpose, and partely for their seruantes to ride on, and to carrie their males and clokebagges after them. Of both which sorts of Geldings, I beléeue this realme hath so faire and so many, as any one countrey in all Christendome. Wherfore I think it good here to shew you the age, and at what time of the Yeare and Mone it is best to gelde such coltes. And first as touching the age, it is best doing when the colt is almost two yeares old: and for to geld him yonger wil hinder his groath very much. Againe, if hee bee much elder, his necke will wax

great, and the strings of the stones will be so hard and strong, as they will not be broken, but must néeds be cut, which as Russius saith, is verie dangerous. Albeit our gelders heere in England be so cunning and expert in that facultie, as they make no matter thereof, for they will cut both olde and yong, at what age soeuer they be, and warrant them to do well enough. And some I assure you do euill enough, and specially if the méetest time for that purpose, as wel of the Yeere, as of the Moone, bee not duely obserued. Wherefore I would wishe you to suffer none of the gelders to take your coltes in hand, vnlesse it be in the spring, as in May, or in the beginning of June, or else about the fall of the leafe, as also when the moone is in the wane. For those two seasons are most temperate, that is to say, neither to hot nor too cold, the excesse of either of which qualities, is verie noisome to those that be newly gelt, and causeth many to peake out of the way. And therefore after that they be gelt, you must sée that they go in a warm pasture, and that they be not ouermuch chased to and fro or otherwise disquieted, but moderatly exercised vntill they be perfectly whole.

## At what age, & what time of the yeare it is best taking vp of colts to to breake them, and how they ought at the first haltering to be vsed. Chap xvii.

They vse in most partes to take vp their coltes when they are but two yeares and the vantage, or three yéeres old at the most, whereby their ioints not being knit, if they be not the more discréetly vsed, their backes may be sone swaied or pinched, and besides that, their legges will growe full of splents and wingalles, and become crooked and lame, before they be halfe old. Wherefore I wish that according to Frederico the Emperours order, no horse colt might be taken vp to be broken, before that he were foure years old and the vantage, and that would bee done in some cold season of the yeare, when they may best endure to trauell, as about October, to the intent that after they haue béene broken in Winter season, when extreame heat cannot annoy them, by driuing them into faint sweats, they

may

may be suffered when spring time comes, and plentie of grasse is vpon the ground, to rest in the stable certaine dayes, whilest they be scoured and fatted with grasse, and so to get vp their flesh that they lost whilest they were in breaking: of which scowring and fatting, wee shall treate hereafter more at large, when wee come to speake of the dieting of horses, for the preseruing of their health. In some places, as at Turberie, the Coltes are so wilde, as after they be driuen into a house, they are faine to bee snared with a snare made of a strong halter comming through a ring of iron, and put vpon a long poale, and so cast about that Colts necke, which should be taken vp, and strained so hard, as it may strangle him for the time, before they can fasten anie halter or collar vpon his head: which wildernes partly perhaps cometh, for that the ground is waste and wild for lacke of partitions, as I said before in the first Chapter: but chiefly for that they be neuer housed, handled, nor made familiar with man in their youth, which is verie needfull, and was not omitted by the men of olde time, as I shewed you before in the thirteenth chapter, and for lacke thereof many a good Colt at his first taking vp through his owne striuing is vtterly marred, and maimed for euer. Wherefore I wish them to bee made domesticall in their youth, in such sorte as is in the Chapter before declared, so shall they not neede to bee forced by any such extremitie when they should be taken vp: and the first collar or halter that you put on a Colts head, would be made, as Rufsius saith, of wollen yarne or else of horse haire, and that verie grosse and broade braided, to the intent it may not cut his head when hee striueth withall. Moreouer, vnto ỳ halter would be fastened two strong reines, on each side one, that the Coltes head may be fast tied vnto the manger on both sides, whereby hee shall not reare nor hurt his legges. And vntill he be somewhat gentle and tame, it shall bee needfull also to set another colte by him that is already tamed, that his keeper may haue the safer accesse vnto him, who must vse all gentle meanes possible, to win him, & shew him no maner of crueltie, vsing often to stroke his backe and necke with his hand, whereunto he shal bring him the sooner, if hee let him eate no meate, but that which he shall be content gently to receiue at

his hand, for hunger will tame the wilde Tigre. And for three or foure dayes let him not goe out to drinke, but make him to drinke in the stable, and when hee will suffer to be touched, then stroke all the other partes of his bodie, and specially his legs, to the intent hée may suffer to be cozied, and that his kéeper may lift vp his féete, and knocke him first faire and softly with a stone vpon his hoofes, and then harder & harder, whereunto if he be often vsed, it shal make him very easie to be shod: and also when his kéeper leadeth him to water, let that tamed colte which gádeth with him, alwaies accompany him, going somwhat before him, to the intent that the other may follow, and so learne to be led in hand: which once had, then bring him with faire meanes to suffer the Cauetsane or headstraine to be put on his head, and to be saddled and girded, and vse to lead him to water being so saddled, to the intent it may not séeme strange vnto him, neither within the house, nor abroad. And when he is brought to this tamenes, then it shal be good to put a paire of soft pasternes on his forefeet, and also, as Rufsius saith, to tie one of his hinder féet with a woollen coarde, so as hee cannot much stirre any way, and that shall preserue his legges (as he saith.) Nigh vnto which no dung must be suffered to lie, for feare of burning his hoofes, but see that he be stand cleane, warme, and drie, & that he be wel meated, often curried, and cloached. And in any case let no shrewd boies or vnruly persons come into the stable, to ticke or toie with him, or otherwise to fraie him: for if he chance to get any euill property at the first, it will be verie hard euer after to bring him from it. And after that he is brought to such passe, as he wil suffer to be handled, haltered, saddled, shodde, and also to be ledde where a man will, then let him be ridden, broken, and schooled, according to Grisons precepts, declared vnto you in my last booke entituled the Art of Riding. But now as touching the mare Colts, it were best to take them vp, when they are two yeares old, and the vantage, to the intent that they may bee handled and broken, either by working them, or else by riding them moderately, but rather by working them vntil they be three years old: at which age, as I haue said before, they are most meet to be coured, & being made tame before, you shall haue the lesse trouble with them, at such

time

time as ye would haue them to be couered.

How and at what age a Colts mouth should be cut, or certaine of his teeth drawne, when the bit for fault thereof cannot haue his true resting place. Chap. xix.

OUr common breakers of Horses, when they chance vpon a colt that hath so narrow a mouth, as it is not able to receiue a bitte highe inough, they vse to cut his mouth wider, in riding him with a verie sharpe square brake made of purpose: which is not good. For it maketh him euer after either to haue too tender or too hard a mouth, and for ỹ most part rather too hard than too tender, by meanes of the hard & cornie flesh which afterwards groweth on both sides of his mouth, where he was so raggedly torne, cut & galled. Wherefore it were much better to cause an expert horseleach to slit his mouth equally on both sides with a sharp knife or rasour so highe as shall bee nedefull, and then to seare it with a hote iron, and to heale it in such sort as the sides therof may grow no more together, but appeare to be a naturall mouth, and of that widenes, euen from the colts birth: and before his mouth be perfectly whole, I would wish him not to be ridden with any maner of bit at al, but onely with a head straine. Yea, in mine opinion it were so much ỹ better, if his mouth were cut and healed vp again before he were taken vp to be broken, for the sooner it is done the lesser it shall bee seene, so that it be not done while he sucketh, for then perhaps ỹ soreneſſe of his mouth would let his sucking, and so hinder his growth. Now, touching the drawing of certain teeth which may also be a great impediment that the bit cannot haue his true resting place, you shal hear the very words of Laurentius Rusius writing in this sort. Because it is very hard, yea & almost vnpossible (saith he) that a horse can haue a perfect good mouth, vnlesse the two tushes, and also other two called of him the plain teeth, & of vs the cheeke teeth or wang teeth be clean pulled out (for after that a horse is throughly warmed if he hath the said teeth, his rider shal hardly holde him) it is verie requisite therefore that the foresaid foure teeth, that is to say, on each side of his nether iawe two, after that the horse is three yeeres and a halfe olde, be cleane

drawne out by an expert hand with instrumentes méete for that purpose, so as his tawe may not be hurt, and so sone as they bee out, let the sore gumme be rubbed wel with salt, somwhat braied or broken before: that done, see that his mouth be not touched for three daies after, loke also that the stable where hee standeth be close shut, so as the winde may not annoy him, and vntill hee be whole, forget not euerie day after that hee hath drunke, first to cleanse the sore place from such filth as there remaineth of his meate, and then to rub it anew, with salt as before: for such continuall rubbing with salt wil suffer no euill flesh there to growe, and if any do grow, then first scarifie the same with your nayles, and rub it againe with salt. Som vse to wash the sore place onely with warme wine, and some adde thereunto both hony and pepper, and rub it after with salte, some againe wash it onely with wine & hony, and put no salt. But truely, if it were first washed with wine, and after rubbed with salt, it were so much the better. Moreouer, vntil the place be perfectly whole, forget not whensoeuer you put any bit in his mouth, to cleanse first the sore place, faire and softly with your finger. Thus far Rusius hath spoke, whose words do sound with good reason, and are confirmed by diuers learned Authors, albeit I my selfe neuer sawe horse téeth drawne in all my life, and yet I must needs confesse that I haue séene som horses, though not many, which haue had their tushes standing so high, as it hath séemed vnto me verie necessary, either to draw them, or else to file them hard downe to the gums, which som men take to be the surest way, for sauing of the horses tawe. Notwithstanding, in mine opinion, the best way (if the Horses mouth bee not already too wide) were to slit his wickes higher, and to make rome for the bit that way: but to say the truth, fewe Coltes or none being well bred in this realme haue néede of either of them both, neither haue our Colts for the most part, any tushes come vp at that age whereof Rusius talketh. And truly I cannot but marueil, that hee appoints two tushes to be drawn on each side of his nether tawe (if I vnderstand him aright) whereas euerie Horse hath but one beneath, and another aboue: and I do no lesse marueil to read in Aristotle, that a horse should haue in al xliiii. téeth, sith I could neuer sée any horse that

had

had aboue yt: that is to say, in the forepart of his mouth fiue beneath, and fiue aboue, & on each side of his mouth two tusches, one aboue and another beneath: neuertheleſſe, I thought good to let you vnderſtand the writers opinions herein, committing ỹ execution of all things vnto your owne diſcretion.

Of the culling out of refuſe Mares and Colts, and alſo of thoſe that ſhould be reſerued for the maintenance of the ſtocke. Chap. 20.

ALthough a man haue neuer ſo fair Stallions & Mares, yet by ſome euill aſpect of the Planets, or elſe by ſom other vnhappy by-chance, or by the negligence of ỹ kéepers, the Coltes do not alwayes com to ſuch proſe as a man would haue them: and therefore I would wiſh the owner though he dwel farre off, twiſe a yeare at the leaſt to ſuruey his ground, & all the cattell therein, to the intent that if there be any not méet to be kept, either for barrenneſs, for age, or for deformitie, they may be made away, & ſolde at thoſe Faires & markets which beſt ſerue to ſuch purpoſes: yea, & if the cattel be wel vſed his increaſe wil be ſuch, as once in 3. or 4. yeares after the firſt 3. yeares be paſt, he ſhal be faine either to ſell or to giue away of the faireſt that he hath: for otherwiſe his ground would be quickly ſurcharged, & not able to fæde them. Albeit I would wiſh him to ſell or giue ſo, as he néed not to buy himſelfe to maintaine his ſtocke, vnto which he muſt haue alwaies a ſpecial regard, in chooſing out from time to time the faireſt & largeſt bodied Colts, as well of Males as Femals, that he can finde amongſt the whole race, to be reſerued for the maintenance of his ſtud or bréed. For as I ſaid in the beginning, vnleſſe the parents be well choſen, ỹ offſpring can neuer be good. Moreouer, it is neceſſarie that ſuch ſuruey be often made for the ſhifting of the cattell, according as both kind and age of the cattel, & alſo the time of the year requireth, leaſt otherwiſe perhaps they may be pinched, both wt cold, and penury, which be the greateſt enemies that Colts can haue. Againe, many contagious ſickeneſſes do often chance amongſt this kind of cattell: at which time, if the infected be not remoued from the whole, the one infecteth the other, and ſo they die all.

For fault of which ſeuering, Sir Iohn Birron of Notingha-

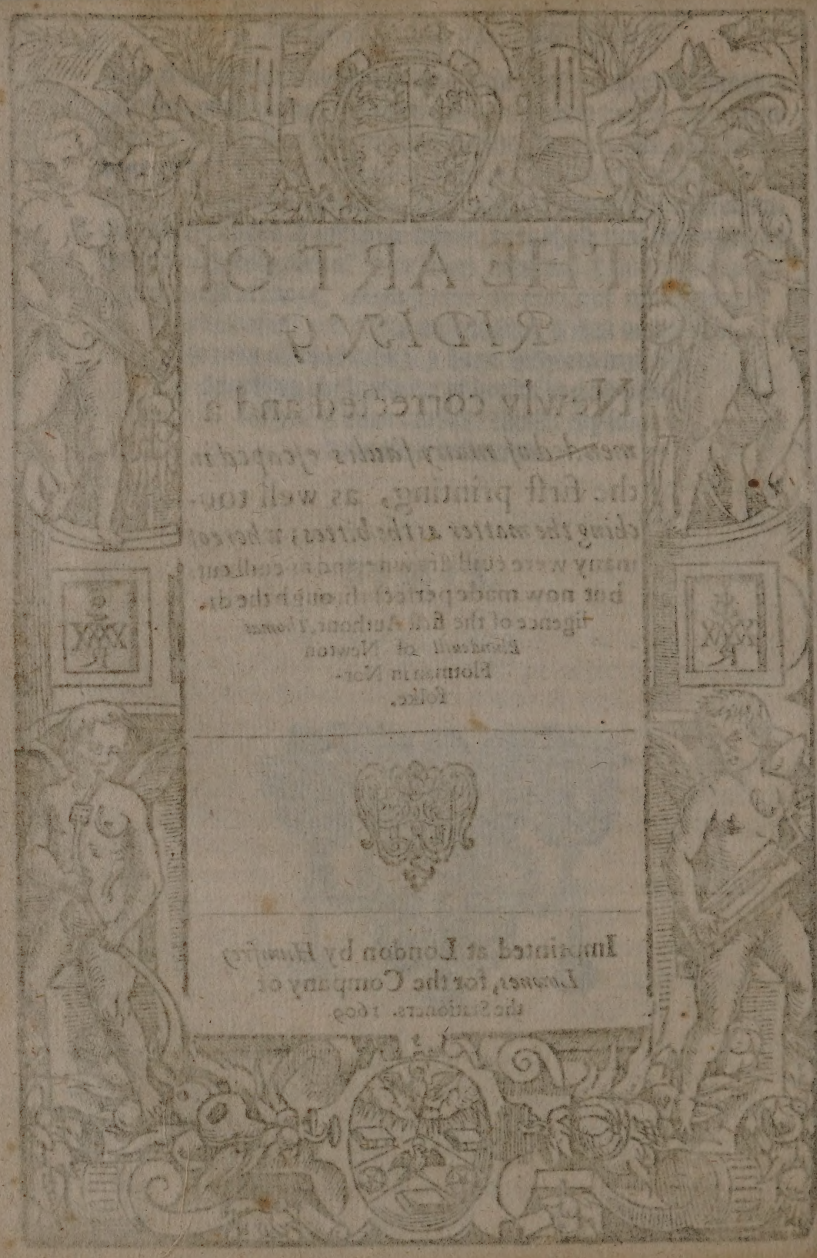
shire, a verie good knight and a notable housekeeper told me this last summer, that not long since, hee lost in one yeare, as manie Mares and Coltes as were worth a thousand marks. But to say the truth, in such a contagious time, it is not onely necessary to seuer the sicke from the whole: but also very needfull that medicine be ministred aswel to the whole, as to those that be not too far gone, for the safegard of their lines, whereof I shal speak hereafter more at large, when I come to treate of the curing of their diseases: and in the meane time I shal desire you to take all that which I haue hitherto written touching the breeding of horses in good part: so shall I haue cause to thinke my labour well bestowed.

FINIS.

# THE ART OF *RIDING*

Newly corrected and a*mended of many faults escaped in* the first printing, as well tou*ching the matter as the bittes; whereof* many were euill drawne, and as euill cut: but now made perfect through the diligence of the first Authour, *Thomas Blundeuill* of Newton Flotman in Norfolke.

Imprinted at London by *Humfrey Lownes*, for the Company of the Stationers. 1609.



# To the Right Honourable and his singular good Lord, the Lord Robert Dudley Earle of Leicester, Baron of Denbigh, Knight of the honourable order of the Garter, Master of the Queenes Maiesties horses, and one of hir highnes priuie Councell, *Thomas Blundeuill* wisheth perfect felicitie.

T is now (my singular good Lord) almost two yeeres: sithens I determined with my selfe, to haue translated into our vulgar tongue, the foure bookes of *Grison*, treating in the *Italian* tongue, of the *Art* of *Riding*, and breaking great horses, and to haue giuen the same vnto your L. as my L. Burleigh, highe Treasurer of England, can well testifie: who, I thanke him of his Lordships goodnes, vouchsafed to peruse my first draught, & misliked not the same. But after that I had translated two bookes thereof, and sawe to what inconuenience I was bound: hauing to follow so doubtfull phrases and manners of speaking, and so confuse an order of writing, as in my iudgement hee vseth, (being indeed a farre better doer, than a writer) by meanes wherof he is constrained to make many repetitions of one thing, and to vse more wordes than neede: I coulde not satisfie my selfe therewith. And therefore leauing to translate any further, I sought howe to bring so good a matter as that is, into a newe forme and better if it might be, and thereby to make it the plainer, and also the briefer. In which my dooing, I trust, if *Grison* himselfe were liuing, I shoulde not offend him at all. For sith it was his intent to make other men partakers of his excellent knowledge in this Arte, so necessarie to be learned, and therfore of right to be published: it would not grieue him then to haue his meaning so plainely expressed in another tongue, as the Readers might easily vnderstand the same. Which whether I haue so done or not, I referre that to your L. iudgement, who hath no small skill, not onely in both tongues, but also in the Art it selfe, wherein your H. is a chiefe Maister, aswell by knoweledge as also by office, and therefore most meet to be both iudge and Patrone of this booke. Which if it shall please your H. to receiue with a willing hand, and seeme to allow my dooing therein, by encouraging the Esquires and Riders of the Stable in breaking the Queenes Maiesties Horses, sometimes

times to followe the instructions thereof (and the rather for that old *Alexander* their first maister, was himselfe as I vnderstande, sometime *Grisons* scholler) and so giue an Example to all others in like manner to followe the same: and specially now, whilest the Queenes Maiestie mindeth so gratiously to prouide for the breeding and keeping of great horses, which no doubt should be to the great profiting of this our Common weale, in the most parts whereof, partly for lacke of Art, and partly for lacke of exercise, chiualry is sore decayed: and I shall not onely thinke my labour wel bestowed; but also to haue receiued the greatest rewarde that I could possibly wish or desire. Yea, and shall be encouraged thereby, to attempt hereafter some other thing of more weight, wherein I may shew my self thankfull to your L. for so curteously accepting this my labour and good will: which is, and shal be alwayes bent to do your H. such poore seruice as I can.

## A Chapter to the Reader, touching the order *obserued in this Booke: very necessarie to be read* and well considered, before he enter any further.

ENdeuouring my selfe gentle Reader for your better vnderstanding, to reduce Grisons Booke, which in the Italian tongue doth treat of the Arte of Riding, and breaking great Horses, into a more briefe and compendious way of teaching, than he to my iudgement hath therein obserued: I sought first to what ende such labor was chiefly to be employed vpon great Horses. And I found, ỹ either it was to make thẽ horses of seruice, or else horses of pleasure, called Stirers. Thẽ I cõsidered what things were

were incident to a horse of seruice, & what to a horse of pleasure or Stirer: & of those things which were cõmon to them both, and which were appertaining to each one particularly. And first I found that to a horse of seruice belonged these chiefe points heer following. That is to say, to trot cleane and iustly, to stop lightly, to turne on both hands readily, to gallop strongly, to manage with single turne surely, and last of all to passe a carriere swiftly: and in all his doings, from the beginning to the ending, to reine well, & to beare his head steadily. All which things are also common to the Stirer, but then it is requisite to the Stirer besides all this, to learne to bound aloft with all soure, & to parke withal, to gallop ỹ gallop galliard, to fetch the capriole, to do the corsetti, and such like kinde of salts. But yet this sufficeth not, vnlesse I might also knowe the nighest meanes for a horse to attaine to these feates, and what order was therein to be obserued: which whilest I sought, beholde the Riders office wholly discouered, whereby I might well perciue that vnlesse ỹ Rider were first instructed in all those thinges that appertained vnto his office, the horse could neuer be well broken. Wherefore minding to comprehend all things in three books, I thought it most meete to begin with the Rider, in teaching him first how to know a good Horse, and apt to be taught, aswell by his colour and markes, as shape, to the intent he bestow not his labor vpon a Jade, or rotle: then how to tame him, & to make him so gentle as he may suffer to bee ridden: after that, how to sit him, and to behaue himselfe in that point like a horseman. Then I proceeded further, declaring the three chiefe points, wherein the perfection of a horseman consisteth: that is to say, in knowing how to helpe, to correct, and to cherishe his horse, and with what instruments, and generally how and when to vse them, and so I end the first book: that done, I come to the horses lessons, which he hath to learne for his part, declaring what order is to be kept therin: to which soeuer of these two ends beforesaid he be broken. And to euerie lesson I ioine such helpes and correctiõs, as are meet to be vsed for redresse of such faultes, as most commonly chance therin: which faults for the most part I call errours, making a distinction betweene errours and vices, attributing vices to the lacke of

knowledge,

knowledge, & vices to nature, or euill custom. As, these be vices, to be restise, to be rammage, to be down in the water, to be skittish, which for distinction sake I do otherwise cal generall faults, because they may chance in euery lesson. Of the most part of which faults, I do treate seuerally in the third booke, declaring therewith the corrections of the same. For otherwise I should bée driuen to make many digressions, and to interrupt the tenour of my talk, which I loue not to do. And I say héere, of the most part, because there be some vices so peculiar & so incident to certaine of the horses lessons, as I am forced to mingle the correction of the same, euen amongst the errors, as occasion requireth, & yet thereby no order broken at all, as any man of iudgement I am sure will easily confesse. Then the horse being throughly broken in all pointes, méete for him to learne, be he horse of seruice, or Stirer: I finally teach you how to ride him to the best shew before a Prince. And there endes the second booke. In the third booke I treat onely of the corrections of the generall vices aforesayd, and of the diuersitie of bits, and to what purpose euerie one serueth. The order of all which three bookes shall more plainely appeare vnto you, by the contents of the Chapters héereafter following. And though Grison séemeth to vse the like order, ỹ I do in the verie beginning: yet he doth not continue the same, but immediatly maketh so many digressions, and interlaceth so many and diuerse matters together, as were inough to confound ỹ memorie of a verie discréet Reader. And yet Grisō not to be blamed, for not obseruing that order or method in writing, which perhaps he neuer had learned: but rather much to be praysed & commended of all men, for vttering, in the best manner he could, that his assured knowledge, which he had gotten with great labour and continuall exercising himselfe in riding, the space of xl. yeares and aboue. Of which knowledge what lacke we Englishmen haue had, and specially haue at this present, is best séene at a muster, when the Quénes Maiestie hath néed of horses & horse men, where oftentimes you shall sée some that sit on their horses like wind shaken réeds, handling their hands and legs like weauers. Or if the horseman be good, then the horse for his part shall be so broken, as whē he is spurred to go forward, he wil go backward

ward: and when his Rider would haue him to turn on the right hand, he will turne cleane contrarie: and when he should stop, he wil arme himselfe and run away, or else stop sooner than his Rider would haue him, or vse such like toies. For redresse of which faults both in man and beast, this booke is chiefly set forth: with the rules whereof, if you that lacke knowledge shal vouchsafe to acquaint your selues not only by reading, but also by exercise of riding, I doubt not but by your spedie profiting therin, you shal haue iust occasion to be thankfull, both to Grison for the first inuention of the matter, and also to me for disposing and reducing the same into a plaine forme and order of teaching. And you shal haue verie good cause also to be thankefull vnto my deare friend M. Iohn Ashlie, M. of the Queens Maiesties Iewel house. For by the dayly practising of the rules of Grison his booke, I sawe him, without the helpe of any other teacher, bring two of his horses, and specially that which he calleth his Valle, vnto such a perfection, as I beleeue fewe Gentlemen in this Realme haue the like. Which euident proofe, together with his incouraging me vnto it, made me the more willing to take the matter in hand: in hope that other men would with like diligence vse the like exercise, wishing al gentlemen lacking his qualities, to be his like in deede: and that not onely in this exercise, but also in many other his vertuous exercises, as well of mind as of body: to the intent they may deserue as he doth, the loue, fauour, and commendatiō of all men: whereof I haue no doubt at al, because I my selfe doe know a number of young Gentlemen that be ginen in these our daies, to such ciuill & commendable exercises, as (God giuing them grace to continue therein) in time to come they wil be no smal ornament vnto this Realme. Which I pray God grant. And there I end, bidding you wel to fare.

# A Table declaring the Contents of the three bookes following. The first booke treateth of the Riders office, and is diuided into these Chapters.


Of the colours of horses, and which be best. Chap. 1
Which horses be wel marked, & which be not. chap. 2
What shape a good horse ought to haue. chap. 3
How to tame a wild horse or colt, at what age, how to make him come to a blocke, and what kind of bridle, or rather halter and saddle, you shall first put vpon him. chap. 4
What the Rider ought to do before he take his horse backe, and being mounted, how he ought to sit in his saddle. chap. 5
Of the three chéefe points wherein consisteth the perfection of a horseman, and how many kindes of helpes and corrections there be. chap. 6
To what end such helpes and corrections serue. chap. 7
Of the voice of the tongue, and sound of the lips. chap. 8
Of the rod. chap. 9
Of the bridle and reines. chap. 10
Of the calfes of the legs, and of the héeles. chap. 11
Of the stirrop. chap. 12
Of the spurre. chap. 13
Of the musroll and the martingale. chap. 14


# The second Booke treateth of the Horses *lessons, and is diuided into these* Chapters.


Of the horses lessons & order therof in general. chap. 1
Of treading the ring, & to what end it serueth. chap. 2
The helps and corrections méet to be vsed whilest he treadeth the rings. chap. 3
Of stopping. chap. 4
Of going backe, and whereto it serueth, and how you shal teach your horse to do it. chap. 5


Of

Of aduancing before, whereto it serueth, and how, where, and when you shall teach him to do it. chap. 6
Corrections to be vsed when your horse aduanceth too high, and out of order, or when you would not haue him. chap. 7
How to make him parke, and to be light behind. chap. 8
How to teach your horses to turne readily on both handes. chap. 9
How to correct your horse, when he is harder to turne on the one side than on the other. chap. 10
Sixe other corrections for the same fault.
Of the whole turnes and double turnes, how and when to teach your horse to make them. chap. 17
Helpes and corrections meet to be vsed for the redresse of such errours, as most commonly doe happen in making the double turnes. chap. 18
Of the Chambetta, what it is, wherto it serueth, and how you shall teach your horse to do it. chap. 19
Of maneging, and how many kindes of maneges there bee. chap. 20
The order of maneging with halfe rest, whole rest, and without rest, all three with single turne, or halfe turne. chap. 21. 22. 23
Of maneging with double turnes. chap. 24
Of the helpes and corrections which are meete to be vsed for redresse of such errors and faultes, as commonly chance in maneging. chap. 25
How and when to teach your horse to passe a carriere. chap. 26
Of the ordering of leaping and bounding aloft, & how and when you shall teach your horse to leape, and park withall, and also to gallop the gallop galliard. chap. 27
How you shal teach your horse to do the Capriole, and to danse the Corruetti, and also to go sideling, either with his whole bodie, or with his rumpe onely. chap. 28.
How to ride a horse to the best shew before a Prince, and where best standing is for him to see. chap. 29

## The third Booke treateth of the corrections of *vices, and of the diuersitie of Bits, and is diuided* into these Chapters following.


Of the corrections of vices in generall. Chap. 1

Of the vices of the head and necke, and first how to correct your horse, when hee beareth his head or necke awrie. Chap. 2

How to correct your Horse, when he beareth not right the lower part of his head, called of the Italians, Muſſacchio, and may be called of vs, the Moſell, which comprehendeth both nose and mouth. chap. 3

Certaine causes, why it is better for a Horse to beare his head vnder then right out, or to cast it vp aloft. And then how to correct him, if hee will not bring in his head, and reane as hee ought to doe. Chap 4

How to correct your Horse when he ducketh downe his head & beareth too lowe. Chap. 5

How to correct that horse which doth ouerreach in his going, that is to say, doth smite his forefote with his hinder foot. chap. 6

How to correct that horse, which whē he is chastised for any fault with the spurre, vseth to shake his head, or eares: also how to know by the moouing of his ears, when he is maliciously disposed, and how to correct him for the same. chap. 7

How to correct your horse when he whineth, intending to strike with his heeles, or to do some shrewdnesse, being in the companie of other horses. chap. 8

Of restifnesse, of the kinds and causes thereof. chap. 9

Remedies against restifnesse proceeding of vile courage. cap. 10

Remedies against restifnesse proceeding of stubbornesse, and stout courage. chap. 11

Other corrections to be vsed against restifnesse, when the Rider lacketh Art, and knoweth not by order of riding, how to get the maistery of his horse & make him to know his fault. chap. 12

Of the contrary vice vnto restifnesse, which is to runne away,


of

of the causes therof, and how to correct the same. chap. 13
How to correct that horse that wil reare right vp when he is corrected for any fault with a sticke vpon the head. chap. 14
How to correct that horse that will fall downe to the ground, when he is a little wearie, or prouoked to do any thing which he would not willingly doe. chap. 15
How to correct that horse which passing through any water, will lye downe in the same, & what is the cause of such vice. chap. 16
How to correct that horse which is skittish or fearefull, and will start at euerie thing, & wherof such vice procedeth. chap. 17
How to embolden your horse, and to make him hardy against other horses. chap. 18
How to make your horse to abide both staffe, sword, great noise, gunshot, or any other thing. chap. 19

Of the vices of the mouth, and causes thereof in generall. chap. 20
How to correct that horse which will either draw vp ỹ bit with his tongue, or defend the same with his nether lip. chap. 21
How to correct that horse which will mow or wry w̃ his mouth and the causes whereof such vice doth procede. chap. 22
Of the kinds of Bits, together with their names and parts belonging to the same. chap. 23
Of the cheekes and eies of Bits, and also of the Kirble, and how they ought to be made. chap. 24
Of close Bits, and for what mouthes they are most meete, and also what vices they do correct. chap. 25
Of open Bits in generall chap. 26
Of broken Pottes, and vpset mouthes, how they ought to bee made, and what vices they do correct. chap. 27
Of whole Pottes how they ought to be made, and what vices they doe correct, chap 28
Of whole Pottes with trenches aboue, how they ought to bee made, and for what mouthes they are most meete. chap. 29

Examples recited by *Grison* aswell in his Preface, as in the *latter end of his booke, not onely commending the aptnesse of a horse* to learne, his stout courage, and long continuance in his goodnesse, but also the worthinesse of the art it selfe: whereunto is also adioyned, who first found out Riding, and who inuented the Bittes, and who first vsed the seruice of Horses in the field.

Aptnesse to learne.

THere is a Citie within the kingdom of Naples, called Sibarie, in the which sometime horses did learne to danse at the sound of a Symphan.

Stout courage.

ALexander ỳ great, had a horse called Bucephalus, which being decked in rotall ornamẽts, would suffer no man to ride on him, but king Alexander himselfe. Which horse being sore hurt at ỳ taking of Thebes, wold not suffer Alexander to leaue his backe, for to mount vpon any other. Such was both his courage & also loue towards his master, who did not forget to recõpense the same. For when the horse died, the king caused him to be solemnly buried: and for a perpetuall memory therof, builded euen there, in stẽd of a Sepulchre, a faire city, and named it after the horses name, Bucephalia. Iulius Cæsar also had a Horse, which would suffer no man to take his back, but Cæsar himself.

Long continuance.

KIng Charles the 8. departing out of Italy, only with fiue C. horsemen, encountered ỳ Duke of Millain being vnited with ỳ Venetians, with Farara, & with Mantua: & vntill hee came vnto Furnouo, he knew no otherwise but that he was so strong as his enemies, which were in al, a thousand fiue hundred horsemen, whereof though the king was aduertised, & therwith heard all men say, it was mẽt to giue place, & saue himself: yet he trusting in the great knowledge & valiantnesse of his horsemen, and specially of his generall called Il Signior Giouanni, Giacomo, Friulzi, a gentleman of Millan, wold not so doe, but said: he wold through, whatsoeuer became of it. And therefore hauing sent before his cariage (the spoile wherof brought many of the grẽdie Italians into disorder) hee himselfe being mounted vpon a great blacke Spanish Horse, which had but one eye. & was 24. yeares old,

old, followed with his hand immediatly after, and gaue ỹ onset, where both hee and the horse did it valiantly, as in that conflict there were slaine & taken on the contrarie part, 17. of the chiefest conducters. Wherby his enemies being discomfited, hee quietly from thence passed on in his iourney: and the king would afterward many times say, that the valiant courage of his horse, was the occasiõ of that victorie. Which horse after that he came vnto the City of Molina, besides ỹ hee was no more trauelled, but well fed, and tenderly kept, so long as he liued, hee was also solemnly buried when he died, by the appointment of the Lady of Burbon, sister vnto the king.

Another example of continuance.

VVHẽ the great captaine came to the exploit of ỹ kingdom of Naples (the camp lying then at Cerignola) it chãced ỹ whilest ỹ Viceroie of Frãce being there with many Barons, prepared himself to fight with the Spaniards. The next day following, there came a knight of Naples called Il Signior Giacomo Guindazzo: who not hauing his Horses there went to Signior Troiano Caracciolo, Prince of Melfe, praying him to lend him a horse, only to serue in ỹ field that day. To whome the Prince being of his own nature very courteous, & liberal withal, gaue him leaue to goe into his stable, & to take his choise of al ỹ Horses there. Whereupon ỹ sayd Giocomo went thither: and hauing viewed them al, chose out a great bay horse, which lately came from the couering of mares, and was 27. yeares olde. And though the Prince perswaded him to take a yonger horse, yet he being expert in that faculltie, and knowing which Horses were best indeed, would not so do: neither was he deceiued in his choise. For the battell being fought the next day, ỹ horse did his part notable wel: insomuch, as although he were sore hurt, & had many grieuous woonds, yet he would neuer giue ouer, but continue to the end, & thereby saued his Riders life: so as both horse and man, after many valiant acts shewed departed ỹ field with the great admiration of all men that did behold them. And finally, Grison attributeth so much honour and praise to a Horse, as he saith, that the worthy state of knighthoode toke his first beginning of this beast, which in ỹ Italian tong is called Cauallo:

and therof commeth Cauilliero, which is so much to say in English as a Horseman or Knight. Wherein I beléeue, Grison tooke his example at the Latine word, hauing also like derivatiõ. For a Horse in Latine is called Equus, whereof is deriued this word Eques, that is a horseman, or knight. But then most commonly they ioyne this word Auratus vnto it, saying: Eques auratus, ỳ is a golden knight: for that he was wont to weare gilt spurres, as I take it. Or else Eques torquatus, that is a chained knight, for that he weareth a chain. With which kind of ornaments, horsemen deseruing wel in the field were sometime rewarded in signe of honour due to their vertue. And though in these daies rewarding of vertue beginneth to cease: ye the selfe same names of honour do still remaine.

The worthinesse of the Art.

MOreouer, to proue that the Arte of riding and of breaking great horses is no vile Art: Grison vseth the authoritie of the noble Poet Virgill, who in his Aeneidos, calleth King Picus for a more excellencie, and greater praise, a tamer or breaker of Horses. He giueth also the like title in diuerse places of his booke to Mesaphus, the sonne of Neptune, the God of the sea, who (as Poets feine) begot vpon Medusa the winged horse, named Pegasus, which flying vp to the heauens, was transformed into those starres that be now called after his name. The Poets faine also, that Bellerophon the sonne of king Glaucus, was vpon this horseback, when hee slew the monstrous Chimera.

The first inuenters of Riding, and of Bits, and also of the seruing with Horses in the field.

THis Bellerophon, as some men say, was the first that inuented Riding on Horse-backe. And the Pellitrones a people of Lapithia, found out afterward the manner of bridles, bits, and rings, to guide horses withall. But they of Thessalia, were the first that vsed the seruice of horses in the wars: which as Grison saith, proceaded of a iudgement, no lesse profitable than diuine.

Thus end the examples of Grison.

The

# The first booke of the Art of Riding.

## Of the colours of horses, and which be best. Chap. 1.

A Horse for the most part is coloured, according as he is complexioned: and as hee is complexioned, so is hee also well or evill conditioned. Againe, hee is complexioned according as he doth participate more or lesse of any of the foure Elemẽts. For if hee hath more of the earth than of the rest, hee is melancholy, heavie, and faint hearted, and of colour a blacke, a russet, a bright, or darke dunne. But if hee hath more of the water, then he is flegmaticke, slowe, dull, and apt to lose flesh, and of colour most commonly milke white. If of the ayre, then he is a sanguine, and therfore pleasant, nimble, and of ẏ colour is most commonly a bale. And if of the fire, then is he cholericke, and therfore light, hot, and fierie, a stirir, & seldome of any great strength, and is wont to be of colour a bright sorrell. But when he doth participate of all the foure Elements, equally, & in due proportion, then is he perfect, and most commonly shal be one of these colours following. That is to say, a browne baye, a dappie gray, a blacke full of silver haires, a black like a Moore, or a fair rone, which kinde of horses are most cõmendable, most temperate, strongest, & of gentlest nature. And next to these are such as be most like in colour to them: as the bright bay, the dark bay, that hath neither leering loke, mealy nose, nor white flank: the bright sorrell, the sibitten white, the white liard like silver, having his outermost parts blacke, as the tips of his eares, his mane, his taile, or all foure fete: and if hee hath a lisle from his mane to his taile, he is so much the better. To these also may be added the ashie gray, having all his foure fet striped. And note this, that as all well coloured horses, are so much the better for having some signe of adustion, that is to say som black mark, at the least in their nethermost partes: so of all ill coloured horses, those are best which haue their outermost parts black. But if he be a bright sorrell, a browne bay with red flanks, a perfect black,

or of any other colour, betokening choler adust: then to mitigate his fiercenes, he had need to haue som white mark. Wherfore such good marks be as necessarie as good colours, I wil treat of them particularie in the next chapter following.

## Which horses be well marked, & which be not. Chap. 2.

The Horse that hath any white marke, is called of the Italians, Balzano, but specially when he is white foted. And of white foted horses, there be foure good, and seuen bad.

### The good be these.

The first is he that hath a white forefote on the farre side.

The second that hath a white hinderfote on the neere side.

The third that hath both his hinder féete white.

But note that such white must not mount aboue ỹ pasterns, for that were an euill signe, betokening debilitie: and such horses be not called Balzani, but Calzati, which is so much to say in English, as hosed.

### The seuen bad.

The first is he that hath a white forefote on the neere side.

The second is he that hath a white hinderfote on the far side, & is called of the Italians, Arzeglio.

The third, that hath both his forefeete white.

The fourth, that hath his forefot and hinderfote both on ỹ far side white, and is called of the Italians, Trauato, that is to say, trauersed.

The fift, that hath his forefot and hinder fot both on the neere side white, and is likewise called Trauato.

The sixt, that hath his forefot on the neere side, and his hinderfote on the far side crosse wise both white, and is called of the Italians, Trastrauato, crosse trauersed.

The seuenth, that hath his forefeet on the far side, and his hinderfot on the neare side crosse wise both white, and is also called Trastrauato.

And note, that if any of the white féete betokening either good or euill, be mingled or spent with black spottes, it confirmeth so much the more, the good or euill signification thereof. It is an excellent

cellent good marke also for a horse to haue a white starre in his forehead, or a white list or fillet, comming down on his head, without touching his browes, and not fully arriuing to his nose.

The horse that hath a white rump or taile, is called of the Napolitans, Rapicano, and is most commonly a good horse: but if he haue any white therewith before, that signifieth him to bee of small force.

The horse that is flebitten onely on the shoulders, or on the flankes, can neither be strong, nor able to endure any hardnesse. For such a horse most commonly is foled in the heate of Summer, betwixt July and August, when flyes are stirring: from the stinging whereof he is not able to defend himselfe, neither with head nor taile, and therefore is called of the Italians, Attaffanato, that is, flieswong, or flebitten.

And besides that, his Damme can haue no plenty of milke to feede him with, the grasse being burnt vp with heate. The white Horse that is altogether blacke flebitten, or red flebitten, is a good horse.

But if he be a Liard, and marked with a fewe red or tawnie flebitings, only on his cheekes, or on his nose, that is a signe of a stubborne Jade and headstrong.

The whall eyed horse called of the Italians, Gazzo, is most commonly wily, and ful of shrewd toyes.

The horse, whose balles of his eyes are white, seeth not wel in the time of snowe.

The horse that hath no kinde of white marke, is most commonly tractable, but then he is ramege, that is to say, he will keep no tuft pase in his going, but fareth as one that goeth with two minds, twixt going and not going.

And though to haue no white mark may chance to al colours: yet it chanceth most to the blacke and dark bay. And note, that when such blacknesse proceedeth of choler aduft: the horse is furious, bold & wilie, and is called of the Italians, zaino. But if of melancholy naturall, then he is fearefull, dull and slowe, which things are more easie to be knowne by his doings, than by his markes.

The horse that hath an Ostrich feather either on his forehead,

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on both sides of his mane, or on the one side, or else behind on his buttockes, or in any place where he himselfe cannot see it, can neuer be euill horse.

But though the horse be neuer so well coloured and marked: yet is he little worth, vnlesse his shape be accordingly. And therefore I will shew you what shape a good horse ought to haue, beginning at his nether parts, wheron a good horseman ought first to fixe his eye and mind.

What shape a good horse ought to haue. Chap. 3.

A Good horse then would haue a black, smooth, drie, large, round, and hollow hoofe: and if it be soft or tender, and broad about the heele, is it the greater signe of lightnes. The reason is, for that the horse from the day of his foling, treadeth light vpon the ground: for hee is afraid to trust to his hoofes, being as yet very tender, & therefore straineth his forelegs, and his backe the more.

The crownes aboue his hoofes would be small and hairie.

His pasterns short, and that neither too low, nor yet too high: so shall he be strong beneath, and not apt to founder.

His loines great, with long fewter lockes behinde, which is a signe of force.

His legs straight and broad.

His knees great, leane, and plaine.

His thighes full of sinewes, the bones whereof wold be short, equal iust, and wel proportioned, and the brawnes thereof when he standeth with his legs together, must bee much more distant one from another aboue towards the breast, than beneath.

His shoulders long, large, and full of flesh.

His breast large and round.

His necke rather long than short, great towards the breast, bending in the midst, and slender towardes the head.

His eares small, or rather sharp, & standing right vp, being of a iust length and largenesse, according to the stature of the horse.

His forehead leane and large.

His eyes, blacke and great.

The hollownesse of his browes wel filled & shooting outward.

His

His iawes slender and leane.

His nostrils so open and puffed vp, as you may see the reade within, apt to receiue aire.

His mouth great.

And finally, his whole head togither would be like a sheepes head.

His mane would be thin and long, albeit I do not mislike the opinion of those that would haue it to be thicke, so that it be not ouer thicke: for as the thinnesse betokeneth aptnesse to be taught, so doth the indifferent thicknesse betoken strength.

His withers or walleis would not only be sharpe pointed, but also right and straight, so as a man may plainly see from thence the departure of his shoulders.

His backe would be short, and that neither rising nor falling but euen and plaine, so shall it be strong: which you shal soone, trie, if you ride him.

For the horse that hath a strong backe, either in his going, or galloping, will continually gather his body round togither, aduancing himself behind, and lifting vp his rump, which the Italians cal Aggruppiggiare: yea, and will doe the like whensoeuer you shal require it, or at the least will not shrinke or distend his backe, but will kéepe it alwayes at one stay. Whereas if he hath a féeble backe, either he will go rolling behind: or else if he aduãceth himselfe for a while at ỹ first setting forth, yet he is not able to continue withall. His sides would be long and large, with a small space betwixt the hindermost rib, and the bucklebone. His bellie long and great, but orderly hidden vnder his ribs.

His flankes not gant, but full, hauing naturall fréezled haires growing on both sides, and the higher that such haires mount, ỹ better.

His rumpe round and plaine, with the fal of a litle gutter, and with a large space betwixt the two bucklebones.

His thighes large and long, with bones ful fashioned, and ful of flesh on either side. The hammes wherof, if they be leane, dry and streight, and the houghes large and crooked like a Hart, it is a signe of swiftnesse. But if the hams be crooked, and ỹ houghs straight, it is a signe that he is good for trauell.

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His tayle would be full of haires, & long down to the ground, the truncheon whereof must be of a measurable bignesse, and wel couched betwixt his thighes: notwithstanding, some do say that a thinne taile and crispe is as good.

His stones and parde would be small: and finally, all his members would be correspondent to the greatnesse of his body, which altogether would be fashioned much like a Stagge, somwhat lower before thā behinde, but not ouermuch for that were dangerous in running. And the greater and stronger the Horse is, the meeter for the warre, and the lighter and more nimble hee be, the méeter to make a Stirer.

Thus hauing shewed you how to know a good horse, and apt to be taught, aswel by his colour and markes, as shape: it resteth now that I teach you how to breake him, and to handle him, and first, if he be wild, or a Colt, how to tame him.

How to tame a wild horse or colt, at what age, how to make him to come to a block, and what bridle and saddle you shal first put vpon him. Chap. 4.

ALthough you may begin to handle your horse, whē hée is full two yeares old, and vpward, yet it were better to tarrie vntil he be three yeares and a halfe old, so shall hee bee the better able to endure trauell, the ioints of his body and legges being then somwhat knit together. For which cause the Emperour Frederico would not haue a horse to be riddē before he were ful foure years old. And at the first handling of him you shal put on his head a certaine collar or halter, called of the Napolitās Cauazana, made in such sort as is hereafter expressed in the first figure of the third booke, which I caused to be cutte of purpose, because that Grison wold in no wise haue a yong horse to be ridden at the first with any bitte, for feare of marring his mouth. In stead of which Cauetsane, our Riders in England vse a chain not much vnlike in effect vnto the Cauetsane, but yet in my iudgement not so méete for a yong horse, for that it straineth the tender gristle of his nose too sore, which kind of halter or Cauetsane, partly for shortnesse of speach, & partly for likenesse of signification, I wil call from henceforth a headstraine. And in putting

putting the headstraine on, you must vse your horse so gently, as he may not only be content to weare it, but also to be quietly led thereby: whereunto with gentle handling you shall quickely bring him. Neither must you vse any other kind of bridle than this, or any other saddle for feare of hurting his back, than a soft pad of straw, vntill your horse can trot cleane, keepe the ring, stoppe and turne roundly on both handes. And in learning to sit close in the pad, you shall also sit close in your saddle: but what soeuer saddle you put vpon his backe, see that it stand alwaies more forward than backeward, vnlesse the horse be ouerlow before. For the more forward that the saddle doth stand, the horseman shall sit therin the more right vp, and with the better grace. The horse then being thus bridled and sadled, cause him to bee brought forth to some blocke, whereas if hee will not stand still whiles you take his backe, then let him that bringeth him make much of him, & sometime threaten him with his voice, and thrust him with his handes on the right side towards the blocke, whereupon you shal stand, continually cherishing him with your hand, to the intent he may suffer you to get vp. But if he be so froward and so stubborne, as he will not come nigh the blocke: then all to rate him with a terrible voice, and beat him your self with a good stick vpon the head betwixt the eares, not leauing him vntill you haue made him to come to the blocke, whether he wil or not: remembring alwayes to make much of him whē he sheweth himselfe obedient vnto you. Or if you will, you may obserue this manner following.

Lead him into some newe plowed ground, and there take the reans of the headstrain by the outermost end in your right hād, and cause some other man to take a sticke in his hand, & by beating the horse therewith vpon the rumpe, to force him to trot, or gallop, so fast as he may driue, turning still round vpon the right hand: during which time, you shall not remoone forwarde your right foote from the place where you are. But onely go round with your left foote, towards the horse, accompanying him in euery turne, so as you your selfe may remaine alwayes in the middest of the circle, which the horse maketh. And immediately after the Horse hath beene well tossed, and wearied with continuall

rinuall turning on the right hand: you shall change sote and hand, and keeping still your place, cause him to make as many turnes on the left hand. And thus you may turne him and tosse him on both hands, until you haue gotten the maisterie, & wholely subdued him. But if the horse be so stubborne, and so froward, as one is not sufficient to make him go turning so often about: then besides the helpe of more persons, with wandes in their handes, you your selfe may also haue in your left hand, a longer wande then any of theirs, and changing turnes, you shall also change the rodde into your right hand. By meanes whereof, it is possible, that you your selfe alone, by beating him sometime, with the one hand, and sometime with the other, shall make him without the helpe of any other, to go freely about. For this kind of correctiō is so grieuous to any horse, of what age soeuer he be, but specially to a Colte, that it will make him so gentle as a lambe, and to suffer you to doe with him what you list. Thus hauing taught you how to tame your horse in such sort, as he shall suffer you to take his back: it is requisite, that before you moūt vpon him, I put you in remembrance what you haue to do: and then being mounted, how to sit him, and how to behaue your selfe in all points, like a Horseman.

What the rider ought to doe, before he take his horse backe, and being mounted, how he ought to sit in his Saddle.
Chap. 5.

FIrst then see that your horse be surely girded, and if hee bee come to weare a bit, see that the kirble thereof bee fastened as it ought to bee. And when you are mounted, make the reanes of your bridle euen, and of a iust length, without stirring your horse, vntill you haue settled your selfe, and your clothes about you. That done, make him to goe forward about two paces faire and softly, and then stay. After that, pase him or trot him to the place where you mind to breake him. But after that he commeth to weare a bit, and is throughly broken: then to keep him in vre with the double turnes hereafter taught, you shall in the ende of the forepayde two paces, giue him also fyre whole turnes, that is to say, first two on the right hand,

hand, then two on the left, and last of all, two on the right. Or else if you will, but three whole turns: that is, for each hand one, so as the first and last be on the right hand. And see that you doe not onely sit him boldly, and without feare, but also conceiue with your selfe that he and you doe make as it were but one body: and that you both haue but one sense and one will. And accompanie him with your bodie in any mouing that hee maketh, alwayes beholding his head right betwixt his eares, so as your nose may directly answere his foretop. Which shall bee a signe vnto you to knowe thereby, whither you sit right in your saddle or not. And let the ridge bone of your backe be euen with his. And let your left hand holding the reanes of the bridle, bee euen with the breast, and in any wise kéep your thighes & knées close to the saddle, holding downe your legs straight like as you do when you are on foote. And let your féete rest vpon the stirrops in their due places, both héele and toe standing in such sort, as when you shall turn your head, as far as you can on the one side, without mouing your body, and loking downward to your stirrup, you shall perceiue, that your toe doth directly answere the tip of your nose: and according as the saddle is made, so shall you ride, long or short. But alwaies let your right stirrup be shorter than the other by halfe a hole, & kéepe your stirrup leathers alwaies vnder your knées: albeit to ride with ỳ stirrup leather aboue the knée, was thought by men of old time, more comely, being partly then constrained thereunto, for that their horses were barded after such a sort, as vnlesse they did ride so, and that with very long spurres besides, they could not reach their bellies. Notwithstanding, to ride as we do now a daies, is a great deale more sure. But to sit a horse well, or to ride both sure and cleane, is not sufficient to make a perfect horseman: and therefore it is necessarie, that héere I also declare vnto you, wherin ỳ perfection of a horseman chiefly consisteth.

## Which be the things that make a perfect horseman. Chap. 6.

GRison saith, that besides the helpe of a good Constellation, inclining you to followe continually, with a feruent zeale the

the schole of Mars: to make you a perfect horseman, three things be requisite. First, to knowe how and when to help your Horse. Secondly, how and when to correct him. And thirdly, how and when to cherish him, and to make much of him.

Which three things being as generall kinds, haue many specialties and particularities belonging vnto them. And though they do seeme wholly to appertaine to the office of the Rider: yet can I not make you throughly to vnderstand them, vntil I come to entreate of the lessons, which the horse for his part hath also to learne: because indeede they must go both together. Notwithstãding, to the intent I may vse fewer words hereafter (you being somewhat instructed before) I will treat of them here in so good order as I can. For though I cãnot shew you, when and how to vse these things in time, vntil I come to the horses lessons: yet I may shew you which they be, how many there be, to what end euerie one serueth, and generally the vse of the same. And first you shall vnderstand, ỹ you may helpe your horse seauen mãner of waies. That is to say, wt your voyce, with your tongue, with your rod, with ỹ bridle, & with the calues of your legs, with your stirrup, and with your spurres. Again, you may correct him seauen manner of waies: ỹ is to say, with your voice, rod, calues of your legs, bridle, stirrop, spurres, and with treading the ring in such sort as shalbe hereafter expressed. But you can cherish or coy him no more but two mãner of waies, that is to say, either with your voice in speaking to him gently, or else by clawing him on the neck with your hand, or with the nether end of your rod. And though that helpes and corrections in the doing, seem in a mãner all one: yet are they diuers, hauing respect vnto the time, for the one goeth before errour, and the other commeth after. For you helpe your Horse, to the intent he should not erre: but you correct him for that he hath already erred. But it is not so easie to know the due time and measure of helping him, as it is to know when or how to correct him. And therfore, I would not wish you to be too busie in helping him, vntil you can kéep time and measure, with both hand & héele, least your horse not vnderstanding your minde, growe to some disorder: but rather vse for a while, onely to correct him, when he erreth, so shall hee be afraid to doe

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the like againe. And in the meane time, by exercise, you shall learne as well the time of helping, as of correcting, and so much the sooner, for that you see the instruments wherewith you helpe or correct be all one.

To what end such helps and corrections serue, Chap. 7.

THe voice is that which any horse feareth most, and is néedfull in all disorders.

The wand or rod serueth to correct the disordering of his head, and to driue shrewd toies out of his minde.

The bridle correcteth both head, neck, and mouth, and maketh him to reane well, and dooth helpe much to embolden, or to man him.

The calfes of the legges, and likewise the stirrups, do order as well the hinder parts, as foreparts of the horse.

The sporres doe not onely make him steady and iust, but also subiect and quicke to vnderstand his Riders mind. The correction of treading the ring, maketh him iust, as well in his manege, as in euerie other feat.

Of the sound of the voice, tongue, and lips. Chap. 8.

BVt first, as touching the voice, you shall vnderstande, that according as the signification of the noyse or worde is: so is it either a correction, a helpe, or a cherishing. For if you would correct him for any shrewde toy, or obstinacie, you must all to rate him with a terrible voice, saying to him, Ah traitor, ah villen, turne here, stop there, & such like. But if you wold help him at any time, then must you vse a more mild and chéereful voice, as when you run him to say: Hey, hey: or Now, now. Likewise if you would haue him to goe backe, you must say with a lowd voice, Backe boy, back I say. Also if you would helpe him to aduance at the stop, you must say chearfully Hup, hup. Likewise to make him light behinde you must say, Darter, darter, or vse such tearms as you shall thinke good. But if you would cherish your horse, or coie him for doing well, then your voice must be most mild of all. As when you say, Hola, hola: or, So boy so, or vse such like coying wordes. And whilst we

talke here of the voice, it shal not be amisse also, to shew you that the sound of the tongue is a very necessary helpe, and méete to be vsed as wel at the stop, as in the turns both single and double, I meane that sound which you commonly make by turning vp the tip of your tõgue almost into ỹ middle palate of your mouth, and then suddenly losing it againe from thence with a chirke. There is also another sound of the lippes as necessarie to be vsed as any of the rest, at such times as shal be hereafter taught, and that is made by closing your lippes hard together, and then in opening them againe somwhat wide, pronouncing as it were, this word Powgh.

## Of the Rod. Chap. 9.

THough som think that the correction and help of the Rod or cudgel is not needful, and that it maketh the horse too fearefull, yet experience teacheth the contrarie: and specially if it be vsed as it should be, that is to say, if you correct him not therewith out of time, but euen in the selfe same instant that he erreth. And assure your self, that to correct a stubborne horse, it hath no fellowe. For if you beat him but once well and surely therwith betwixt his eares, and vpon any part of his head (his eies excepted) you shal need to giue him the lesse correction euer after. But touching the rod, diuerse thinges are to be considered. As first, when to beare a rod: secondly, how to take it when it is first offred: thirdly, how to beare it at al times: fourthly, to what end it chiefly serueth: finally, how and when to vse it as a help, correction or cherishing to a horse. And as touching the first two points, I say, that if you breake a yong horse which was neuer hãdled before, you shal bear no rod in any wise vntil hée come to be ridden with a bit, and then at the first time that the rod is offered you, you must take it gently, for not making him afraid therof: and hauing receiued it, you must coy him on the neck therwith, either by clawing him on the withers with the nether end thereof, or else with the middle of the rodde, lying crosse vpon his mane, and that shall make him to abide it the better euer after. Now to the other two pointes. In learning how to beare your rod, as wel when you pase or trot your horse,

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as also whē to manege or to run him: you shal also learn therby how to handle both spear and sword, to which end the bearing of the rod chiefly serueth. Wherfore it shal not greeue me, here to shew the order thereof. And first, when you do but pase or trot your horse, you shal beare your rod in your right hand, with the point right vp toward your right shoulder, holding ẏ nether end therof betwixt your thumbe and your other fingers, distended and not closed. And when you would occupy it, you shal let the point fall either on the left side, or on the right, according as occasion shall require.

But when you manege your horse, you shal stretch out your arme towards your right thigh, and couch your rod crosselwise ouerthwart the horses necke: and when hee hath made his first course, and turned on the right hand: then a little before the end of his second course, when he is in a manner ready to turne on ẏ left hand, you shal lift your rod from thence, and hold it with the point right forth, on the right side of his head, not farre from his eie, or else somewhat lower towards the eye of the bit, and as he changeth turnes to and fro, so shall you change the placing of your rod, either of the one side, or of the other: which be the two chiefe warding places of the sword.

Or if you will, you may hold your rodde as you would doe a speare, when you runne, that is, with the point vpward, and the nether end lowe towards your thigh, but not resting vpon your thigh, and a little before that ye come to ẏ place of turning, you may let the point fall on that side, which is requisite, and so sone as your horse hath made his turne, to holde it againe with the point vp as before, whereby you shall learne to charge and discharge a staffe.

Now, as touching the vsage of your rod in helping or correcting your horse (for the way of cherishing him therewith, is before taught) because I cannot, as I haue heretofore sayd, teach you the particularities thereof, vntill I come to the horses lessons: let it suffice you therfore in the meane time, to learne those generall rules herof ollowing. First, if your horse wil not turne on any side that you would haue him, then beate him with your rod on the contrary side. As for example, if you would haue him

to turne on the right side, then beat him on the left shoulder: and if you would haue him to turne on the left side, then strike him on the right shoulder. Likewise if he be harder or heauier, or go more disorderly on the one side than on the other, beare your rod for the most part on that side, to the intent the sight thereof may put him in remembrance of his fault. Againe, when you would haue him light before, strike him on ỳ forepartes, as on his shoulders, and forelegs: and when you would haue him light behinde, strike him on the flankes, rumpe, and hanches. In what time and how much, shall be taught you hereafter.

## Of the Bridle and Reanes. Chap. 10.

GRison comparech the Bridle vnto the sterne of a ship: for as the ship is wholly guided by the sterne, so the horses head is only ruled by the bridle: and therefore this is an instrument which requireth many considerations, not only for the diuerse fashions of bits, together with the members thereof, as the Chéeks, Barbles, Ports, Trenches, and such like mẽt to serue diuerse mouthes, & to correct diuerse vices, as hereafter shall be declared in the third booke at large, and set out with figures: but also for the knowing how and when to vse the same. For it is the Riders part, first to knowe when to ride his horse with a bit, then what manner of bit, & how to vse the same at the first putting of it into the horses mouth, and in what part of his mouth the bit hath to rest. Then how to holde the Reanes, when euen together, and when one shorter than another, & what measure he shall kéepe with his hand, in bearing hard or lowe, high or low, when to vse false Reanes, and when to leaue them, when and how to correct him with the bridle, and when to help him: of all which things I héere intend to speake briefly, and so plainely as I can.

First therefore, when your Horse can trot clean, and kéep the ring: yea, and stop and turne indifferently well on both hands: then take a plaine Cannon with right Checkes, such a one as hath bẽn somwhat worne before, and put it on with the headstal ouer his headstraine, making him with the Reanes thereof by little and little to féele it in his mouth, and sée that the bit lie vpon

his

his nether gums a little aboue his great teeth or tushes, which is the due resting place thereof. And if the bit were first annointed with a little hony and salt, it would make him ẏ more to delight in it, and to be alwaies champing thereon, and to stay his mouth vpon it ẏ more temperatly. For if his mouth be distempered at ẏ beginning, it is not afterward so easily holpen, which thing is little considered of our english horsemen, that vse to ride their young horses euen at the first, with so rough a brake or bit as may be gotte, which is one of ẏ chiefest causes why we haue so many headstrong iades. Now as touching the holding of the reanes, you must hold them in your left hand, so as your litle finger, and ring finger may be betwixt the twoe reanes, and that your thumbe maie lie close vppon the reanes, with the brawne thereof turned towards the pummell of your saddle: and if you haue no rod when you manege him, or runne him, then you shal take the ouerplus of the reanes that hangeth downe, by ẏ midst in your right hand, holding the same hard by your right thigh, & the more that you turne the nether end of your left fist inwarde, and the vpper end outward, the more you shal bring in your horses head, but therin you must vse descretion, according as occasion shall serue. And indede to say truth, that point apperta inech not so much to the holding of the reans, as to the bearing of your bridle hand, whereof there be three manner of waies. The first is, to bear it low, beneath ẏ pummel of ẏ saddle, euen vpon the withers, and that is to correct him. The second is, to beare it somwhat higher about the middle of the pummell, and that is to maintaine him. The third is, to beare it vpon ẏ vppermost edge of the pummel, and neuer much higher, and that is to be vsed only when you would manege him or make him to doo any thing. For to bear the bridle hand ouer high, as the vnskilful Numidians in Affrik vse to do, is disallowd for diuerse respects. First, for that it wearieth the arme: secondly, if need were, you could not haue so much power to stop your horse when you would. Thirdly, being in the fielde against your enemie, the bearing of your hand so high, would be a trouble vnto your defence, & a cõmodity to your enemie, for that he might easily cut your reans in sunder. Finally, you can haue no steddy hand vpon your horse any

time together, whereby your horse shal never reane wel, nor yet haue a steddy hed: for who so wil haue his horse to beare his hed steddily and to reane wel, let him beare his hand rather low than high, so shal he be able to kéep it alwaies at one stay, which is one of the chiefest points of horsemanship. Notwithstanding if your horse be any thing hedstrong, then when you manege him, or otherwise handle him, beare not too stiffe a hand, but rather somewhat light & temperat: for the more you force him, the lesse he wil yéeld: but if he hath no such fault, then do alwaies as I told you before. And remember alwaie when you turn your horse, to draw neither your arm nor hand more of one side than of another, but to kéep it euen with the horses creast, & only by turning your fist a litle inward or outward, to signifie vnto him on what hand you would haue him to turn. And note, that for a while, it shal not be amiss, when you ride your horse, to let him wear his bridle & his headstraine both together, vntill he be somwhat acquainted with the bridle, for then you may take away his hedstrain, and in sted therof put on a paire of false reans, which are very necessary for a yong horse in the beginning, to make him bear his head right: for bearing the ordinary reanes alwaies iust and euen, you may shorten the false reans on any side at your pleasure. Which false reans, when your horse begins to war somwhat perfect in his doings, you may also take away, and ride him only with the ordinarie reans: and if he happen any way for lack of them to hang more of one side then of another, or to beare his head or neck awrie, you may correct it by bearing the contrarie reane shorter than the other. As for example: if he wrieth more on the left side than on the right, then holding the bridle as I taught you before, put in the right rean with your forefinger, & so hold it iust betwirt your forefinger and your thumb: & if néed be, you may also ioyn your long finger vnto your forefinger, to hold it the faster. But if he wrieth more on the right side than on the left, then you shall shorten the left rean by putting two or thrée of your nethermost fingers betwirt the reans. But as touching the true order of correcting & helping your horse with the bridle, in time & measure, it shall be declared vnto you hereafter, as occasion shall serue: and therefore in the meane time let these generall rules suffice you.

Of

## Of the Calfes of the legges, and of the heels. Chap. 11.

I May well shew you how to correct or helpe your horse, with the calfes of your legs, and with your heeles, and where to strike him, together with the diuersity of the stroaks, and the names thereof, and to what end euery one serueth: but to tell you exactly in what time, and with what measure, vntil I come to the horses lessons, I cannot. But of one thing I will aduertise you in any wise, at the first not to be rash, but to vse such temperance & moderation, as you may cause your Horse by little and little to vnderstand your meaning, without any disorder or confusion. And therefore it were best doing with him while he learnes his first lesson, which is to tread the Ring, as shal be hereafter declared vnto you at large: in the which, according as you shal see occasion, you shall help him, or correct him, by striking him some what behinde the former girt, which is the right spurring place, either with the one calf alone, or with both together, with the one heele alone, or with both euen together, or together not euen, or els with one immediatly after another: for so many kindes of strokes there be seruing sometime to diuers purposes, and therfore haue diuerse names accordingly. For the first is called the single stroak of the contrary leg, wherwith you must help him to turn on which side you would haue him. As for example, if you would haue him to turne on the right hand, then you must touch him with your left leg: if on the left hand, then with your right leg. And likewise when he hanges more on the one side in his going, thã on the other, or be stiffer necked of any side, or bear not his head right, you must correct him for the most part with the single stroak on the cõtrary side. The second is called the double stroke or euen stroke, because you must strike him in the spurring place with both legs euen together, which properly & chiefly is to make him to go forward. Notwithstanding, it serueth also many times to make him to turne, to stoppe, to aduance, & for many other purposes, as you shal perceiue hereafter. The third may be very wel called the closing stroke, because it makes the horse to close his turn rsũd & iust: and the order of it is thus. When you would haue your horse to close his turn wel

(as for example on the right hand) then in his turning touch him with both legs together, but not euen: that is to say with ỹ left leg in the true spurring place, and with your right leg somwhat more behinde towards the horses flank, which maner of striking Grison calleth in his language Attondare. The fourth serueth only as a correction for sundrie vices hereafter to be declared, & then you must strike your Horse in the spurring place thrée or 4. times together with one leg after another, so fast as your legs may walk, which kind of strokes Grisō calleth Botti roris pōdēti: but in our tongue, meethinke it were not amisse to call it the Bunching strok, because your legs must go like two bunching bætles, or els the clinching stroke, fetching a similitude from the Boteweights, whose hammers, when they clinch ỹ nails, do answere one another. In all which foure kinds of strokes, if you cā learn to kæp time & measure wᵭ your legs & hæles, you shall be the better able to kæp time with your spurres, when you come to ride your horse with spurres. For there is no other difference betwirt them, but that the stroke of the one toucheth the quick, and the other not: because the one is blunt, and the other sharp.

## Of the Stirrop. Chap. xii.

THough the correction or helpe of the Stirrop be seldome vsed: yet it is a good helpe to a yong horse in the beginning, vntil he be somewhat broken. For if he carieth his head or neck awrie, or hang of one side more than of another, by striking him with the stirrop vnder the shoulder on the contrary side, you shal make him to amend his fault.

## Of the Spurre. Chap. xiii.

HAuing declared to you in the beginning (when I shewed you how many kinds of corrections and helps there were) to what end the spurre serueth, and also now in a manner last of all, in speaking of the vsing of your legges and heeles, in what part of the body you should spurre your horse, and how many kinds of strokes there were, & when to be vsed: it resteth now that I shewe you when it is time to make your horse both to abide ỹ Spur, and also how to know the Spur, and al ỹ helps

therof

thereof, and where, and how you shall do the same. And first you shall vnderstand, that in old time men were so ignorant, as they would neuer spurre their horses, vntill they were not only staid of head, but also perfect in all such orders as were vsed in those daies: so that though their horses were six or seauen yéres old, yet could no man assure himself of their gwdnesse. For most commonly when they came afterward to be spurd, either they waxed so stubborne and so diuelish, as they would not abide the Spur, but fal a leaping and flinging, and trying of maistéries to cast their Riders: or else they became so restife, and so dul therewith, as they would abide it too wel, and stand euen stil, not once mouing for it, and the more they were spurred, the worse they would be. And although that those Riders had extraordinarie meanes, to make a horse to abide the spurre, whether he would or not, as by forcing him when they spurred him, to plunge into some great water or sea, or to behang him with spurs made of purpose to molest him, or else perhaps, as I haue séene some Riders do, to behang him with a paire of stuft boots, or with sandbags, hauing spurs or prickes to grieue him whilest they chase him to and fro; and so to wearie him that way: yet they had no waies to make him know the helpe of the spurre, and thereby to vnderstand the Riders meaning, and all for lacke of knowledge and gwd cõsideratiõ. They lackt knowledge, for that they would neuer almost spurre their horse, but whẽ they ran him, so that the spurre serued them in a manner to none other purpose. Againe they lackt consideration, in that they suffred their horses to go so long before they spurd them. For they might wel think ỳ it was not so easy to make a horse either to abide, or to know the spur, when he is grown in age, strength, and lustie courage, as whẽ he is yong, simple and feareful, and apt to rule as a man will himselfe. And therefore I would wish you not to deferre the time so long, but after that your horse hath worn the bridle half a score of times, let him learne to know the spur, be he neuer so yong, leane, or féeble. Which would be don, either whilst you cause him to trot the ring in some new déepe plowed ground, in helping him therewith, as hereafter shal be taught, or else whẽ you trot him in the like ground right out. And though you maie

giue

giue him therwith a carriere, if you wil: yet to auoid all disorders that might therof insue, the surest and readiest way is onely to trot him: forotherwise you must tary vntill he can run a carier well, & stop as he ought to do, which perhaps would be to long. And of whatsoeuer disposition or metall the horse bee, dull or quicke: forget not in any wise in the selfe same instant, that you put spurs vnto him, to help him with your voice, or else with the sound of your lips, and that shall put by all shrewd toies, wherof perhaps he might otherwise shew you some, as to leap, to fling, to cast his head betwixt his legs, to lie down, or such like. And if you see that the spurre doth make him to spring forward, and to amend his pase, then make much of him, and so by little & little you shall bring him acquainted with the spurrs well inough, in time to know all the helpes and corrections of the same.

But if you haue to spur a horse, that is somwhat in yeares, and of nature ramege or restife: then see that in any wise you spurre him not at the first, either when you trot him or run him, but only while you pase him fair & softly through some towne or citie: and so going, sodenly put spurs vnto him, helping him in the selfesame instant with your voice, or with ỹ sound of your lips, and force him therwith to fal into a swift trot, the length of twenty or thirty pases: which if he doth, make much of him, and for a while vse him thus halfe a score times in a day, vntill he be perfect in that: which when you see he is, then you may go into the field, and there whilest you trot him in some newe plowed ground, spurre him and help him as before, making him to gallop as hard as he may driue, a prety way together, and then stay, making much of him, if hee did well. Thus proceeding frō soft pase to trot, and from trot to gallop, by continual exercise, you shall make him both to feare the spur, and also to know the help therof. Notwithstanding, there be some horses of nature very liuely and sensible, which through euill breaking at the first, and afterward by sufferance, haue bēn so euill accustomed, as they will neuer yeeld to the spurre: but so soon as they fele it, they wil leape and fling, and take on like spirits. Wherfore, if ante such Horse chance te come into your hands, first for a while, ride him without spurres, and vse him to tread the ringes, vntill he hath

learnd

learnd to go quietly in the same, and to kéep the true path: which when you sée he doth, then ride him with both spurres, and also with a good wand in your hand. And whilst he treads the ring, in some new plowed ground with deep furrows, when time is, touch him with your spurs at sundry times thrice, and if he wil then play his vagary, beat him forthwith with your wand vpon the head on both sides, and betwirt the eares, and vpon his fore-legges, al to rating him at the selfe same présent with a terrible voice, and neuer leaue him till you haue made him to yéeld vnto the spur, without making any resistance at al. And to the intent that he may suffer the pricke of the spur the better, it shall be necessary to weary him, sometime with continuall turning and trotting him round, and ouerthwart the furrows, and sometime by trotting & gallopping him right out, in one path to and fro. By meanes of which trauel & often sparring him togither, hee shall fall into such a sweate and heate, that the strokes shall grieue him the lesse. By meanes whereof, he shall not onelie be content to abide the spurre, but also learne by the stroke therof, to know your wil & to obey the same, and so much the more if you shall not forget when he doth wel, to make much of him. But note by the waie, that this last order belongs to a Horse of great courage, for if you should in such sort molest & wearie a horse of a dul spirit he would giue ouer, & for faintnes become restife: and therefore a good consideratiõ must be had, as wel to the horses strength, as to his vice.

But now, though I shewd you in the last chapter before, how many kinds of strokes of the spur there were, & generally how and when to be vsed, yet let it not greiue you that I repeat here some part thereof once agin with some little addition not to be left out. First then, whensoeuer your horse wil not turne as you would haue him, or be stiffer necke of one side thã of another, or wil not carry his head right, nor continue his trot, you shall correct him alwaies with the single stroke of ỹ contrary spur: but if he ware slow in his trotte, bearing his head and necke right, then you shal correct him with ỹ euen stroke of both spurs togither: for that stroke properly serues to quicken him, & to make him go forwarde, and vnproperly for the other purposes in the

former chap. rehearsed. It is requisite also that I shew you somwhat more plainly how to correct your horse with one spur after another, which I called before ỹ clinching stroke, ỹ order whereof is thus. When your horse cõmitteth a fault of any side, as for example on the left side, then giue him with one spur immediatly after another, three strokes. Whereof ỹ first and last must be on the right side: but if he erreth on the right side, then ỹ first and last stroke must be on the left side. And note, ỹ after your Horse wil abide the spurre, and also knoweth the helpes thereof, it shal not be good to spur him often, but only when you see it very nedful: as to direct his head and necke, when he reaneth not well, or to helpe him in his single or double turne, when you mannege him, or else to giue him swiftnesse when he passeth a cariere: for ouermuch spurring will make him swing tailed, and specially if he be a Iennet or Turkie horse, whose tails be alwayes lose & at liberty, and are not tied as the coursers be.

## Of the Musroll and the Martingale. Chap. xiiii.

TO these foresaide kindes of helpes and corrections I think that Grison would haue added the musroll and the martingale, but that they seemed perchaunce vnto him extraordinary thinges and not meete to bee vsed, but at certaine times, and specially the Martingale. Which though it was first inuented by Euangelista, an excellent rider, and a great horsemaster of Millã, not only to make the horse to haue a steady head, but also to make him light before in his aduancing, and in his going to gather his body roũd together: yet Grison seemeth not greatly to allow it: albeit he saith it may be vsed when ỹ horse is very heauy before, & marueilously vnstaid of head, neither would he haue the horse weare it aboue xv. daies together at the most: thinking it indede a great deale better, to bring the horse from such faults by such meanes as are by him hereafter taught. But he praiseth much ỹ Musroll, saying that if ỹ horse doe naturally kẽp his mouth close together, that then it cãnot hurt him: but if he hold it opẽ, then it doth not only help him, but also correct him of that fault in such sort, as after that he hath bin vsed a litle ther vnto it wil make him steady, both of mouth, head, and neck, and to reane as he should do.

The

# The second booke of the art of Riding.

## Of the Horses lessons in generall, and order thereof, and in what time of the day he should be taught. Chap. 1.

THus hauing declared vnto you, with what instrumentes you should helpe or correct your Horse, and generally how, and when to vse them, and also how and when to cherish him, all thinges onely appertaining to the Riders office: I thinke it therefore now méete to shew you what ỹ horse hath to learne for his part, and also what order you shall kéepe in breaking him: for if a horse bee taught vnorderly, he shal neuer be perfect in any thing. As for example, if you (as some men doe for lacke of skill) would vse to gallop your horse, before he can stop well in his trot: or to run him, before he can stop wel in his gallop: or to manege him with a swift gallop, before he can stop, aduance, and turne readily on both hands, you shal marre him for euer. And therfore take héede that ye onely follow this order heere following.

First, you must vse great diligence in making him to tread softly, to kéep one path, and to trot cleane, which is one of the chiefest points of all, because it is harder by nature for a Colt to trot well, then to go softly, to run or to gallop.

Secondly, you must teach him to be light at stop.

Thirdly, to aduance before, and to yarke behinde.

Fourthly, to turne readily on both hands, with single turne and double turne.

Fiftly, to make a sure and readie manege.

Sixtly, to passe a swift Cariere.

And finally, if your horse be nimble, and apt thereto by nature, you may make him a Stirer, by teaching him to bound aloft, & to yarke withall, to gallop the gallop galliard, to fetch the Capriole, to do the Corsetti, and such kinds of saults: and in all his doings, from the beginning to the ending, you must see that he keepe well, and beare his head steadily, which is the foundation of

of all the rest.

And by obseruing this order, with all the rules thereto belonging, in such sort as shal be hereafter taught: ye shal within the space of foure or fiue monethes, make your horse perfect in all points. Notwithstanding, there be some yong horses so slowe of growth, as although they can do their thinges orderly: yet they shew no strength or force in their doings, vntil they be fiue or six yeares old, because their ioints before that time are not ful knit, nor their mouthes throughly staied. And note, that frō six years to fifténe, a horse being not maimed nor hurt, may verie well continue in his goodnesse: yea, and some horses perhaps wil continue vnto xx. yeares and aboue, as the examples before recited, doe well testifie.

Moreouer, sée that you teach your horse earely in ỹ morning, before you giue him his prouander, not failing in the beginning of his breaking, vntill he be somwhat perfect, to ride him euerie day once. And afterward to ride him twise in a wéek shal suffice, vnlesse you sée that such rest doth cause him to forget his lessōs, for then, vntill he hath gotten that which he had lost, it shal be requisite to ride him againe euerie day one houre at the least, or so long time as he is able wel to endure, leauing him alwaies with a good mouth. For to take ouermuch of a horse at once, is ỹ next way to make him fainted hart, and restife.

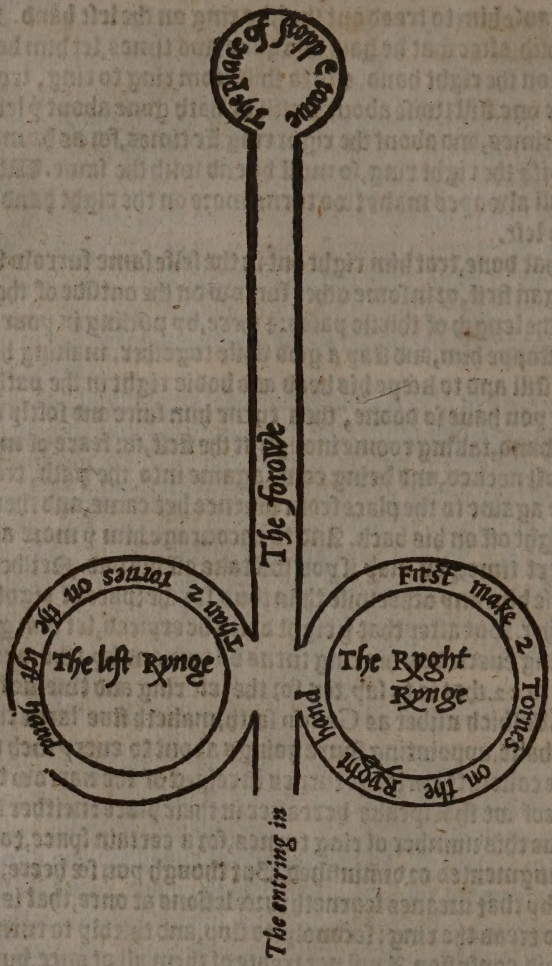
## The order of treading the Ring, and to what end it serueth. Chap. 2.

TO the intent then that your Horse may haue a lofty pase, trot cleane, and learne to kéepe one path, you shal first cause him to bee brought into the fielde, nigh vnto some newe plowed ground, and the déeper the furrowes bee, the better to make him lift his féete: whereas after that you haue taken his back, you shall trot him right out, about the length of a hundred pases. That done, you shall enter a good way into one of the furrowes, in such part of the land, as you may haue space inough, and mould inough round about you, and there on the right hand ouerthwart the furrowes, make him to tread out twise together a round ring, conteining in circuit about xxv. or xxx. pases: and being come about at the second time, to ỹ place where he began,

gan, cause him to tread out the like ring on the left hand. About the which, after that he hath also gone two times, let him begin againe on the right hand, & so to shift from ring to ring, treading euerie one still twise about, vntill he hath gone about ỹ left ring foure times, and about the right ring six times, for as he must begin with the right ring, so must he end with the same. Whereby he shall alwayes make two turns more on the right hand, than on the left.

That done, trot him right out in the selfe same furrow where he began first, or in some other furrow on the outside of the right ring, the length of thirtie pases: & there, by pulling in your bridle hand stoppe him, and stay a good while together, making him to stand still and to kéepe his head and bodie right in the path. And when you haue so doone, then turne him faire and softly on the right hand, taking roome inough at the first, for feare of making him soft necked, and being come againe into the path, trot him backe againe to the place from whence hee came, and there you shal light off on his back. And to encourage him ỹ more against the nert time, you may if you will take off his pad. Neither shall you vse him any otherwise than thus, for the space of eight daies together. But after that ỹ eight daies be expired, let him goe, increasing euerie day his ring turns by two and by two, vntill hée come to 22. that is to say, ten for the left ring and twelue for the right. Which nũber as Grison saith, maketh fiue large turnes, and a halfe, appointing foure goings about to euery such turne: and he calleth them large turnes in respect of the narrow turns, whereof we shal speake hereafter in their place: neither would he haue this number of ring turnes, for a certain space, to be either augmented or diminished. But though you sée heere, that ỹ horse by that meanes learneth thrée lessons at once, that is to say first to tread the ring: secondly, to stop, and thirdly to turne: yet to auoid confusion, I wil not treate of them all at once, but of euerie one particularly by himselfe. And first, to the intent you should the better vnderstãd of what sort the ringes ought to be: behold here this figure following, liuely expressing both ringes together, with the furrowe and place of stopping and turning.

There


The Place of stoppe e coune
The sorowe
First make 2 Tornes on the Ryght hand
The Ryght Rynge
Traim 2 tornes on the left hand
The left Rynge
The entring in

THere is also another fashiō of a ring, which because it serueth onely as a correction, when your horse is harder to turne on the right hand than on the left, I will not therefore speake of it heere, but reserue it vntill I come to treat of the correction of that fault.

If your Horse be weake and feeble, you may cause the rings to be trodden out before with some other horse, to the intent ỳ he may haue the better will to follow in a way readie beaten to his hand: and also if he chance to swarue out of the path, he shal the sooner perceiue his errour, and thereby the quicklier return into the right path againe. And though your horse be not weak: yet it shall be best at the first, not to tread out the rings with a trot, but rather with a soft pase, vntill the path be somewhat beaten, that he may see his way where he goeth, and then to followe on with an indifferent trot: yea, and if your horse be ouer lively, or too quicke, you shal not suffer him to trot the rings at all: but only to pase them faire and softly for certaine daies together, vntill he be somewhat staied and acquainted with them. For otherwise, hee will beare too hard vpon your hand, and seeke to flee out.

And when the ring pathes, through continual treading ware somwhat hard, you may shift into a new place, where the ground is newly eared with deepe furrowes, and that, as I sayde before, shal make him to lift high. Albert, Grison in his fourth book, doth not allowe often changing in the beginning, vnlesse that necessitie so forceth: saying, that the horse being continually taught in one place, shall the better remember his lessons: yea, and also his corrections, whereby there shall be bred in him as it were an habite of well doing. Notwithstanding, when you come to manege your horse, or to passe a Cartere, I would not wish you to vse alwayes one place, or one length, least hee be to seeke when you change places, thinking that he should not do it any other where: or if he do it, not to passe his accustomed length, and so perchance stoppe before you would haue him.

But there be some which wil not vse their horses to two rings, but to one onely, which is verie euill for a young horse, because it wil make him faint hearted & fearefull: for when he commeth to the place where he is wont to be turned, he wil striue to go forth right, & so perhaps become restife, or at the least, not go in on the ring so euenly & so fully as he should do. Notwithstanding to a horse of some years, & of a lively spirit, it may sometime be very well allowed, and especially if he be stiffe necked, & hard to turn: yea, we also to shew, that though the forme of ỳ rings be thereby

somewhat altered: yet he should alwaies kéep in one teue. After that your horse hath worne the bridle a while, & is well acquainted therewith, you may increase your ring turnes euerie daie, by two for each ring, vntil you come to xlvii. which maketh large turnes and a halfe, that is xxii. for the left ring, and xxiiii. for the right, according as your horse shal be in breath, and able to endure it: otherwise a lesse number may suffice, for ouermuch labor doth weaken a yong horse, which weaknesse doth not appeare in some, vntill they be foure or fiue yeares old: for at the first the feare that he hath of his rider, maketh him to vnite his force together, & to beare it out the more stoutly. But after that he is well acquainted with his rider, he will not shew so much force in his labour and trauel as he did before, but his naturall weaknesse will then appeare, & so much the more, as he shal grow in greatnesse, and be laden with flesh. Notwithstanding the number of turnes, aboue said, is conuenient for any horse of an indifferent strength: for lxii. turnes may suffice any horse, bee hee neuer so strong or good of breath, vnlesse he be too vnreasonable strong, in age, euill broken before, & vsed to libertie: for then to breake him of his stubbornnesse, it shall not bee onely requisite to giue him lxii. turnes, but also Cxxii. but that seldom for feare of weakning his backe: yea, & perchance euerie member beside. But most cõmonly after the wearing of his bridle, obserue ỹ nũber of xlvi. which you shall not increase, but vpon such occasion as is afore-said, nor yet diminish the same, vnlesse it be when you trot him, and turne him to and fro in manege wise, after that you be come out of the rings, whereof we shal treat hereafter in his place.

## The helpes and correctiõs meet to be vsed whileſt he treadeth the rings, also when you shall gallop the rings, and to how many purposes it serueth. Chap. 3.

IF your Horse in treading the ring, trotteth not fast inough, or be ramege, that is to say, not kéeping a iust pase, but fareth as one that were in two mindes, not caring whether hee went or not: or if hee will suddenly stoppe before his lesson bee ended, then quicken him often with your voice, or with the sound of your lippes before mentioned, and by little and

and little, making him know ỹ help of your leg and héele, by ſtri-
king him ſomtime with one leg or héele, and ſomtime with both,
according as his fault ſhal require. The order whereof is before
declared in the firſt booke, the xi. Chapter. And to make him goe
the ſuller, it ſhall be good for the moſt part to hold your contrarie
legge in his ſight, and likewiſe your rodde, when you come to
bear one. As for example, if hee be ſtiffer on the right ſide thã on
the left, thẽ hold vp your left leg, and lay your rod croſſe ouer his
left ſhoulder. But if hee be harder on the left ſide, then hold out
your right leg, & hold your rod right out not far from the horſes
right eie, remembring alwaies to hold the reans of your bridle,
the one ſhorter than the other, in ſuch ſort as I taught you in the
firſt booke ỹr. Chapter. But if he be ramege either by nature, or
by euill breaking, then make him to tread the ringes firſt with a
ſwift trot, and then with ſo hard a gallop as he can driue, helping
him in due time with your voice, rod, or ſpurre, as occaſion ſhall
require, and that ſhall make him forget toies, and to attend his
way: but ſée that you gallop not him firſt, for feare of making
him reſtife. And this way ſerueth to correct a great many of o-
ther faults as the lightneſſe and playing with his head, and when
he draweth vp his tongue and will not clap his mouth vpon ỹ bit
as he ought to do. Or if he go iumping without order, or ſling-ing
with his héeles, likewiſe if he be too haſty or furious, this will ſtay
him, and cauſe that he ſhall afterward ſtop the better in his Ca-
riere, and not run away. Alſo if he vſe to piſſe alwayes when he
is handled, this taken in time will correct him. And finally, if
he be ſlow and dull, this will quicken him. But if hee be verie liuely
and quicke of himſelfe, then you ſhall doe cleane contrarie to
this: that is to ſay, you ſhall neither giue him ſwift trot, nor
gallop. And whenſoeuer you gallop your horſe, remember al-
waies to helpe him more or leſſe with your voice, rod, or ſpurre,
according as the quality of the horſe ſhall require: and when hee
doth well, to cheriſh him. But though the galloping of the
ring ſerueth to ſo many good purpoſes, as you haue heard: yet for
the moſt part, let him tread the rings with a good round trot, and
not to gallop them at all, vnleſſe ſome of the aforeſaid occaſions
do ſo require.

## Of stopping. Chap. 4.

HItherto we haue spoken of treading the rings only, now we will shew you how you shall teach your horse to stop. I tolde you before, that hauing ended the number of your ring turnes, you should trot your horse right out in the middle furrow betwixt the ringes, vntill you come to the place of stop, and there to staie a good prettie while together, keeping his bodie right in the path: which if hee will not doe, but stand ouerthwartly, either with his foreparts or hinder partes, or else perchance with his whole body, cleane out of the path: then see that ye touch him at the first neither with heele nor rod, least hee not knowing the one nor the other, bee distempered, and perchance fall a running away. But you shall appoint a footeman to stand at the place of stoppe, who shall direct him into the right path by thrusting him with his handes on that side which standeth out of order. And this way is not onely good for a young horse, but also for any other horse that is in age, and by meanes of euil breaking hath been accustomed to stop wrong: but then ỳ footman besides thrusting him with his hands, may also chastise such a horse with a rod, by striking him therewith on that side that he erreth: or if you will not so do, you may cause your horse to goe still in ỳ same path a yard or two further forward, and there stop him, holding the reane of his headstraine straighter on that side, whereon he most forceth your hand, than on the other, and that shal kéep him whether he will or not, in the right path.

And after that he beginneth to be somwhat obedient vnto you, you may direct him into the right path when he stoppeth wrong, with the ouerplus of the reanes of his headstraine, by beating him therewith moderatly, vpon that shoulder or romp that standeth furthest out of order. But beware in any wise that you strike him with no rod, before he come to weare a bridle.

It is verie good also to trot him to som hanging ground, called of the Italians, Pendino, and there to stop him somewhat down the hill, but therein you must vse good discretion in chosing such a ground, as shall bée méete for the purpose. For a yong horse many times will bee afraid to stop downe the hill, and specially if it bee ouer steepe: yea, and it may do him more harme than good, being

being an occasion perchance that he shall neuer after be light of stop. Wherefore, at the first it shall be best to stop him in such a ground as shalbe neither too steep, nor yet too plain, but betwixt both, as that is which somthing salleth, & riseth immediatly again: so shal not the horse be afraid of it. And afterward, when hee is growne in age, and hath more force and strength, you may be the bolder to stop vpon a steeper groũd, according as you shal think it needful. And let this suffice you for this time, because we shall be forced to speake more of stopping in the Chapters next following.

## Of going backe, and to vvhat end it serueth, and hovv & vvhen you shall teach your horse to do it. Chap. 5.

After that your horse hath worne the bridle, & knoweth the rod and spur, you shal teach him whē he hath stopt, be it vpon a hanging ground, or otherwise, to go backward three or foure steps: which wil not onely stay his mouth, and make him light of head, but also to lift his legs, & to be ẏ more apt to aduance before. For the which cause it were necessarie to talke of this before I procéede any further.

To teach your horse then to go backe, you must so sone as he hath stopt, pull in your bridle hand moderatly, according as the horses resistance shall require, and so kéeping your hand steddy without giuing him any libertie, strike him fair and softly vpon the bowing of his necke with your rod, saying vnto him with a soft voice in that instant, Back, back, I say, & solicit him in that sort a prettie while together: for ẏ which if he will not moue his legs, or doth make any resistãce, then spur him in time, first with one spurre, and then with another, but most on that side whereas you sée his hinder parts to stand most out of order, to the intent that he may go right in ẏ path. And besides this, you may haue a footman to stand at the place of stop, with a rod in his hãd, who in the selfe same time that you will pull in the bridle, shal knocke him faire & softly with his rod vpon the knées, & seldome or neuer vpon the snowt. And somtime let him onely threaten him without beating him at al: but if this wil not suffice, then let the same man take the chéeks of the bit in his hand, and so force him to go backe, not leauing to molest him, sometime one way, and some-

time another, vntill at the least he hath made him to pull backe one foote. And whensoeuer he doth well, bee ready immediatly to cherish him for the same, and then let him stay a while. That done, cause him to do the like again, by pulling in the bridle onely, and none otherwise. For the making much of him before, will cause him to go back of his owne accord with both legs: if not, then by correcting him in such sort as is aforesaid, you shal force him to goe back whether he will or not.

*Of aduancing whereto it serueth, and where, how, and when you shall teach him to do it. Chap. 6.*

TO aduance, is a tearme vsed of our horsemen, signifying that which the horse doth, when at the stoppe hee lifteth vp both his forefeet euen together, somewhat aboue the ground, & letteth them fall againe twise or thrise together, which the Italians called Far le posate, and it is so necessarie a thing as without it the horse can neuer manege well, nor turne readily, as hereafter you shall well perceiue. Wherefore, when your horse can stop wel, and will also goe backward when you would haue him, it is meet to teach him to aduance.

And as it is not amisse to teach it him, when you stoppe him in the furrow betwixt the two rings, so it is very good also to go into some long sandy way which is euen and plain, and there, after that you haue trotted him right out with a verie swift trot, ỹ length of forty foote or thereabout, to stop him, helping him immediately with your voice, and also with both spurs euen together, and sometime with your rod, by striking him therewith on the right shoulder, but seldome on the left. And if he will not aduance for that, no not so much as with his right legge: then keeping still a steddy hand vpon him, correct him immediatly twise or thrise together with the euen stroke of your spurres, or else with one spur after another, helping him alwayes with your voice, as by saying vnto him, Huppe, huppe: or such like word. And immediatly after, trot him out againe the like distance with a swift trot, and at the stop do as you did before, continuing still the same, vntill you haue made him to lift his feete from the ground, and to aduance thrise, or twise together at the least: which

when

when he doth, though it be but meanely, yet make much of him, and coy him with your right hand, or with your sticke, by clawing him therewith on the necke nigh vnto the withers, suffring him there to stay a while: that done, trot him forth againe, and at the next stoppe, you shall see that so soone as hee heareth your voice, he will aduance of his owne accord, not onely with one leg, but with both: yea, and so many times together, as you will haue him.

And in so doing, you shall seldome help him with your spurs, or rod, but onely with the calfes of your legges, and with your voice, which must alwaies be one. And if the ground where hee stoppeth be somewhat hanging, it shal be so much the more easie for him. But after that he can aduance, and doth vnderstand the helpes of the voice, rodde, and spurre, beware that ye vse not to giue him such short stoppes one after another, least he take a custome to stoppe sooner, and therwith to aduance higher than you would haue him: but rather trot him right out, the full length of a Cariere, towardes the knoll of some hill, and there stoppe him vpon the browe thereof, or steeper downe, according as the qualitie of the horse shall require, helping him as is aforesayde. For assure your selfe, that a hanging ground is very necessarie, and specially when the horse is not apt of himselfe to bowe his houghes behinde: for the horse that is naturally light, hath not so much need of a hanging ground, because that hee with a little helpe in plaine ground, will learne to stoppe euen vpon his buttocks, which is the chiefest grace of the stop. For vnlesse the horse in his stoppe doth bowe his houghs orderly, and run sliding on his hinder legges, neither stoppe nor aduancing shal be prayse worthy.

When your horse can stop and aduance well in his trot, then you may teach him in the like grounds to do the same vpō a gallop, vsing the selfe same order, helpes and corrections, that are aboue written. And forget not in any wise to make much of him when he doth wel, but for the most part let him continue the doing thereof vpon a trot: for that shall make him so light and so perfect, as when you come afterward to gallop him, or to runne him, he shall not be to seeke therein.

*Corrections to be vsed when your horse aduanceth too high, or out of* order, or when you would not haue him. Chap. 7.

IF your horse aduanceth too high, or liftet h not vp his feete euen together, and with such grace as he ought to doo, correct him immediatly with the euen stroke of your spurres, and sometime with your rodde also, striking him therewith vpon the flankes: that done, put him forwarde againe the length of a short maneging course, and there stop, helping him to aduance with your voice, and if néede be, with the calfes of your legges, or with your spurs, or else with your rod vpon his right shoulder, and somtime with all together, according as you shall see it needfull. Or after ỹ you haue corrected him, you may if you wil without putting him forward, turne him, and go back againe in the selfe path a good pretty way, and then to returne from thence with a good round trot, and to stoppe him vpon the same knoll, where he stopt before, and so to continue returning still to and fro, vntill hée hath amended his fault, & aduanceth as you would haue him: which when he doth, make much of him, and let him stay a good while after, for the longer that you stay him, the more perfect you shall make him.

If your horse hath gotten an euill custome to stoppe, & to aduance withall, suddenly, or oftener than you would haue him, which fault most commonly is incident to young horses, then correct him immediatly with your voice, & also with your rodde vpon his flanks, & somtime vpon his forelegs: yea, & if néede bée wt your spurs euery māner of way, forcing him to go forward, and not to aduance, but when you shall prouoke him thereunto, either with voice, spurs, legs, or rod, or with all together, according as the horses qualitie shall require. For som horse is so vile of courage, and so dull of vnderstāding, as if you alwaies vse to helpe him with spurres at the stoppe, then so often as you shall spurre him, to make him go forward, he wil by and by stoppe and aduance, and the more ye spurre him, the worse he will be, and so perchance become restife. Wherfore you must vse great diligēce and good discretion, in making him to know by the harde or lose bearing your bridle hand, when you helpe him with your spurs

to

to go forward, and when to stop. And vntill he be perfect therein, it shall be best to helpe him at the stop onely with your voice, & not to vse your spurres or rod, but when you doe correct him, or else when you would haue him to go forwarde.

## When and how to teach your Horse to yark, and to make him light behinde. Chap. 8.

IF your horse bee of conuenient age, and growne to his full strength, and therewith haue a good back, and able to endure, (for otherwise it should doe him more harme than good:) then hauing taught him to stoppe, and to aduance before, you may teach him also to yarke behinde, by helping him in his aduancing, with your voice, and with your rod, beating him therewith behind, somtime on the one side, and somtime on the other. And if néede bee, you may also helpe him with the euen stroke of your spurres, not leauing to molest him in such sort, vntill you sée that he beginneth to gather vp his rumpe, and to lift his hinder legs: which doing, you shall leaue beating, and make much of him, and afterward you shall see that with a very little helpe, he will fall vnto it of his own accord. You may also, if you will, appoint a footman that hath some skill, to stand behind you with a long rod in his hand, who at ỹ stop whilest your horse aduanceth, may helpe him with his voice, and by beating him on the haunches, and on the rumpe, cause him to yarke: which way is verie good, so that your horse be not ouer lively, and therewith also naturally headstrong, for then perchance it will make him to spring forward, and to fall a running: wherfore vntill he hath a staid mouth, it were better to vse the first way, or else to bring him vnto it in the stable in this sort:

When you come into the stable stand behind him with a long rod in your hand, and beat him therwith on the mid rumpe, helping him in that instant with ỹ voice wherewith ye vse to make him light behind, not ceasing to molest him in that sort, vntil hee gather vp his rumpe, and cast out both his héeles euen together, and that of a tall height twise or thrise together: which doing, you shall leaue beating, & make much of him, suffering him to rest a good while after. Thus soliciting him twise or thrise a day, you

shall

shal make him so light & so ready of his héeles, that he will parke so sone as he shal but hear your voice, or the whisk of your rod: & when he can doe it well in the stable, then to make him the more perfect therin abroad, you may whē you ride him, cause a cōtmā to stand behind you with a long sticke in his hād, who by threatning him, and beating him on the rumpe, may cause him to park so often as you shall thinke it méete: if your horse be verie light and nimble of himselfe, you may teach him also to leape at the stop, and to parke withall. But sith that leaping is more méet for a stirring horse, than for a horse of seruice, & also for that there bée diuerse kinds of leapes, I will not therfore treat of that here, but defer it, vntil I haue shewd you y order of turning & maneging.

*How to teach your horse to turne readily on both hands.*

*Chap. 9.*

I Intend to speak héere of the narrow & straight turnes, & not of the large turns, otherwise called ring turnes, for we haue talked of them sufficiently before.

And first you shall vnderstand, that of the narrowe turnes, there be three kindes, that is to say, halfe turne, whole turne, and double turne. The halfe turn is when the horse turneth on the one side, and that setteth his head that way that his taile before stoode, and is called the halfe turne, for the horse maketh but halfe a circle: but if hee doubleth the same, and setteth his head that way it stood at the first, then it is called a whole turne, for in turning round about he maketh a circle cōplete. And two such whole turns, doe make a double turn, which Grison calleth Volta raddopiata, who appointed to euerie such turn foure halfe turnes, which may be otherwise called single turnes. And note, that in turning, diuerse things are to be obserued. First, that hée bring in the contrarie leg vpon the other, and that hee carrie his legs neither to high, nor too lowe: also that he kéep his ground, neither pressing forward, nor yet réeling backewarde in his turning: also that hee kéepe his bodie in one stay, writhing neither head, necke, nor any part of his bodie, but to come in whole and round together, and to close his turne in so narrowe a roume as may be. But first you shal teach him to make the single or halfe turnes in this sort and order here following.

When

When you are come out of the rings, trot your horse right out in the middle furrowe vnto the place of stop, and there after that you haue stopt, turne him faire and softly on the right hand, taking rome enough at the first, as I shewed you before, for feare of making him soft necked: that done, giue him ỹ like turne on the left hand, & then turn him againe on the right hand, remembring alwaies to begin with the right hand, and to end with the same, & see that in euerie turne he bring in the contrarie forefoot, vpon the other forefoote. As for example, when you turn him on the right hand, cause him to lift vp his left forefoote, & to bring it in ouer the right forefoot, which you shal do by helping him with your voice, or wt the sound of your tong, before taught in ỹ first book the eight chapter, in saying to him, turne heere, and by striking him with your rodde moderatly vppon the left shoulder. And when you turne him on the left hand, helpe him with your voice or tong as before, and with your rod on the right shoulder to bring in the right forefoote ouer the left forefoot: which act, Grison calleth Incauallare, which is so much to say, as to lappe one thing ouer another.

And note, that though your horse at the first doth not bring in his contrarie foot ouer the other orderly, but perchaunce vnder the other, yea and that with knocking his legs together: it maketh no matter, for the griefe therof shal be a good correction vnto him, and in time shal make him to amend his fault. But if hée be harder to turne on the one hand than on the other, then you shall helpe him with the contrarie legge or spurre, or with your rodde, by beating him vpon the contrarie shoulder: and sometime to make him to close his turne truely, it shal be néedfull to helpe him with the closing stroke of your héels or spurs. Which kinde of helpe is necessarie for two causes: first, for that it will make him to turne roundly, as well with his hinder parts, as with his fore partes: Secondly, because some horse is so quicke and so lively, as when he is touched but onely on the contrarie side, hee will turne perhappes with to stiffe a necke, loking the contrarie way: or contrariwise, hee will wrie his head or necke too much on that side that he hath to turn, or else turn beyond the place, and out of the right path, in which he should close his turne.

Albrie

Albeit such helpe is not commonly to bee vsed, but at certaine times when some great necessitie requireth it, for the first helps are more kindly, and therefore ought to be more ordinarie. But if he be so hard of any side, as the foresaid helps cānot make him to turne when you would haue him, then you may vse these corrections here following.

*How to correct your horse when hee is harder to turne of the one side than on the other, which fault is called of the Italians,*

Credenza. Chap. 10.

BVt first I thinke it mēt to shew you the causes of that fault, & then how to correct it: and you shal vnderstand, that there be diuers causes, whereof one may be the naturall inclination, whereby euery horse is more apt to turne on the left side than on the right. Secondly, the hardnes of the bit pinching his mouth on the one side may so grieue him, as he dare not turn on that side. Thirdly, lacke of knowledge how to handle his legs, and to rean with his necke, may cause him to turne so frowardly, and so vnwillingly, as he feeling himself neuer so little wearie, wil turn no more at that time, for any thing that ye can do. But to say the trueth, wearines & lacke of breath, may cause any horse, be he neuer so wel broken to doe the same. Fourthly, the ignorance of the rider in helping him otherwise than he should so do, may make the horse so amazed, as he knoweth not what to do, vnderstanding not the riders intent. Fiftly, the horse may be euill broken, and therby be made harder of one side than another: for then if he be angred neuer so little, hee will not turne perhaps on that side that you would haue him, and the worse, if he shall perceiue that you be afraid of him, and that you will suffer him to haue his own will, and to turne which way he list: for that shall be an occasion to make him more stubborne, & to continue stil in his fault. But now, though Grison here according to euerie one of these causes, could appoint proper corrections (which indēde were the best order of teaching) yet to auoid confusion, as hē saith, he wil not so do, but rather teach you such general kindes of corrections as may amend that fault, of what cause soeuer it procēdeth.

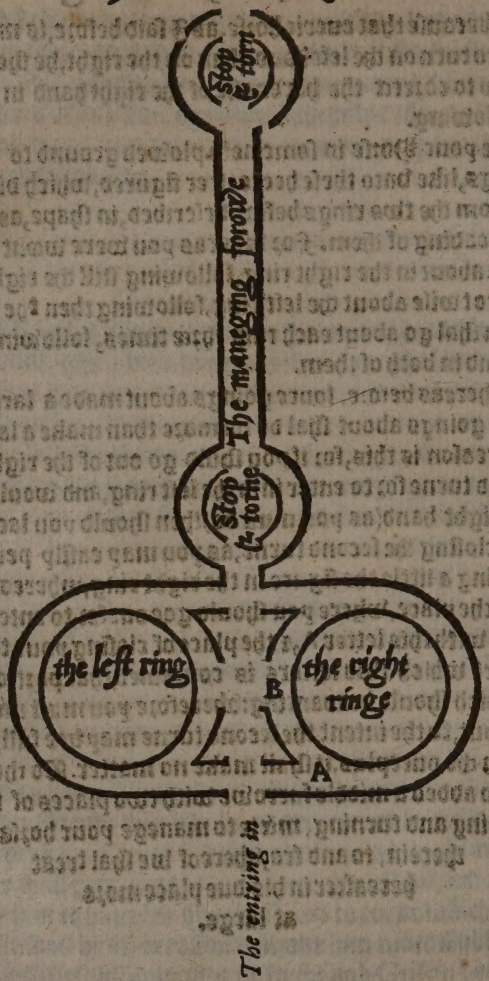
And

And because that euerie horse, as I said before, is more apt by nature to turn on the left hand, than on the right, he sheweth you first how to correct the hardnesse of the right hand in this sorte here following.

Make your Horse in some new plowed ground to tread out two rings, like vnto these hereafter figured, which differ not so much from the two rings before described, in shape, as in the order of treading of them. For whereas you were wont before to go twise about in the right ring, following still the right hand, & then to go twise about the left ring, following then the left hand: now you shal go about each ring three times, following still the right hand in both of them.

And whereas before, foure goings about made a large turne, now fiue goings about shal do no more than make a large turne: and the reason is this, for if you should go out of the right ring, at the second turne for to enter into the left ring, and would followe still the right hand (as you must do) then should you lacke a good deale of closing the second turne, as you may easily perceiue by considering a little the figure in the right ring, whereof I haue marked the place, where you should goe out for to enter into the left ring with this letter A, & the place of closing your turn with B, betwixt which two letters is contained that portion of the circle which should be wanting: wherefore you must needes goe thrise about, to the intent the second turne may bee fully ended, and as for the ouerplus, it shall make no matter. To these rings is also added a middle furrowe with two places of stopping and turning, meete to manege your horse therein, to and fro, whereof we shal treat hereafter in his due place more at large.

Thus




THus you may continue shifting from ring to ring, and following still the right hand, vntill you sée that hee beginneth somewhat to yeeld: which I beléeue he wil doe, by that time that you haue trotted him about xlv. times, which make seuen large turnes and a half, that is to say 21. times about the left ring, and

xviii.

xviii. times about the right ring: or if that suffiseth not, you may trot him, xvii. times about the left ring, and xxx. times about the right ring, which maketh ix. large turnes and a half, and that is a conuenient number for any horse hauing that fault, though he be right good of breach. And when he hath ended his ring turns, you may trot him right out in the middle furrow, ỹ length of a good cariere: and there, after you haue made him to stoppe and to aduance, you shall make much of him, and suffer him to stay a good while, holding as wel then, as at all other times (vntil he hath amended his fault) the right reane of his bridle shorter than the other. And after that he hath so paused and is quiet, you shall cause a footman that hath some skil, to stand right against him with a sticke in his hand, and whileſt you moue your fill to turne your horse on the right hand, ỹ footman in the same instant shal strike him with his sticke on the left side of the nose, and not leaue beating him vntill he turne, not forgetting alwaies while he beates him, to vse that sound of the tongue which I taught you before. And to the intent that the horse at such time reare not right vp, he may beate him sometime vpon the legges: by which so molesting him doubt ye not, but that you shal make him to turne as he ought to do, & hauing turned you shal first make much of him, and then trot him backe againe in the same path or furrow, euen hard to the edge of the rings from whẽce he came. Whereas you shall appoint another footman to stand with a rod in his hand, to the intent that when you haue stopt your horse againe there, and are ready to turne him (which must be still on the right hand) the footman may rate him, by saying, Turne villaine, or such like words: yea and if need be, also beat him in such sort as the other man did before. But if your horse be very hard to turn, then to make him do it the more easily, you may at euery end of the path after that he hath stopt & aduanced, make him to go backe about two paces, and in his going backe, turne him: but after that hee beginneth to fall somewhat vnto it, beware that ye vse not then to make him go backe, least he get an euil custome to make his turnes altogether abandonate, and too much vpon his hinder loines.

Thus by trotting him vp and downe, and turning him two & fro

fro fyre or seaue times togither, when you come out of the rings, you shall in the space of three dates throughly correct that fault, which fault, if it were not ouermuch, I wold not wish you in his going to and fro, to turne him euerie time on the right hand, but first on the right hand, and then on the left interchangeably: but so, as the first and last turne may be alwayes on the right hand, vsing alwayes such helps & corrections as are aboue said. But if your Horse be harder to turn on the left hand than on the right, then begin first with the left ring obseruing order meere contrarie in all things to the first, which I am sure that you can doe of your selfe without any more words.

Sixe other corrections for the fault aboue said, whereof the first here followeth.

YOu may also correct that fault without riding him in any ring, or otherwise in this sort.

First, cause him to bee brought into some long narrowe way inclosed on both sides with hedge, dike, or wall, and there after that you haue reaned vp his head, by slaying the reanes of the bridle with the button vpon his neck, if he be hard to turne on the right hand, fasten the one end of a good long cord or thong to the middle of the bit on the right side, and tie the other end vnto his surcingle on the same side, straining it good and hard, for to make him bow his necke: that done, let him so remaine in the middest betwixt you and him that brought him, or some other whom you shal thinke meete, hauing each of you a rod in your hand, with the which rods you shall chase him betwixt you from one to another, by striking him alwaies when hee commeth towardes either of you, vpon the left side of the nose, and no where else, and that shall make him turne on the right hand, not forgetting alwayes, when you beat him, to helpe him with the sound of the tongue before declared, and you shall see that in a verie little while, the onely sound of the tongue, and the sight of y rods, will make him to turne of his owne accord, without any beating at all. Yea, the sound of the tongue it self is so good a warning vnto him, as if he be once accustomed thereunto, he will not tarry the beating: and though sometime he happe to fall down in his turning,

ning it maketh no matter, for he will rise againe alone: yea, and that shal be a verie good correction vnto him. And when you see that he beginneth to wax somewhat weary, loosen ỹ thong from the surcingle, but not from the bit, and immediatly get vppe on his backe, taking the loose ende of the thong in your right hand, which shall serue in stead of a false reane, and trot him forth the length of ten or xii paces, and there stop him, whereas one must stand with a rod in his hand, ready first to threaten him, and then if neede be to beat him therwith vpon the left side of his nose, for to make him turne. And in the same instant you shall not onely helpe him with your tongue, but also by straining a little ỹ thong which is in your right hand. And hauing turned, trot him backe againe to the place from whence he came, whereas may stand also another footman to help him at the stoppe, as the former did, to turn again on the same side: or for lacke of another man, you may turne him the second time on the left hand, and so trot him forth towards the first man.

Thus trotting & turning him to and fro, you shal correct him quickly of that fault: neither shall you neede to vse the helpe of straining the cord or thong in his turn, aboue twise or thrise at ỹ most. For the sound of the tongue, the feare of the footmans rod, and the holding of the right reane of his bridle shorter than the other, shal suffice. And note, that as the thong being put on the right side of the bit doth correct the Horses hardnesse on the same side: so likewise, if it be put on the left side it wil correct ỹ horse, that is hard to turn on the left side: for sides and places of corrections onely changed, the order is all one in both.

## The second correction for the same fault.

YOu may also correct that fault by tying a corde vnto the headstraine on that side that the horse is hard to turne, so as it may runne through the ring thereof, to the intent that when you pull the cord, it may straine the horses head, and being let go, it may slacke againe, the loose end of which cord, let some footman hold in his hande: and whilest you being on his backe doe helpe him with your tongue to turne, let the footman pull the cord, whereunto if the horse be vsed awhile he wil after-

ward turne of himselfe, so soone as he shalt heare the sound of ẏ tongue without the helpe of the cord.

The third correction for the same.

TAke a cord about a yard long, and tie ẏ one end therof vnto ẏ vppermost eye of ẏ bridle on that side that ẏ horse is not hard to turn, & let it not come betwixt his neather lip, & neather gũs, & so passe through ẏ vppermost tie of ẏ bit on ẏ other side, being strained so hard as ẏ horse can wel endure it, & there stay it, by making a knot onely vpon ẏ cord, hard by the cheek of ẏ bit, without calling the cord about ẏ iron, so as it cãnot slip: ẏ loose end of which cord, when you ride your horse, you shal hold in your hãd in stead of a false reane, and so often as you pul your cord, & help him with your tongue, you shal force him to turne whether he wil or not. And least a cord perhaps wil gal your hãd, you may if you will make it all of leather, sauing that which must bee in the horses mouth, for otherwise it would not grieue him.

The fourth correction.

THe fourth correction is, by putting the kirble hooke on that side that the horse is most harde to turne: on the backeside of which hooke, next to the horses lippe, would be made two little sharpe prickles, fashioned like cockes spurs. Which kinde of hooke Grison calleth in his language, Guancietto: or if you wil you may set those prickes on the backside of the link wheron the said hook hangeth, which link is made like an s in this sort S. so shal they prick him higher towards ẏ mouth. And though som horse is corrected by hauing those pricks placed on the contrary side: yet is it more kindly to haue them placed where I haue shewd you before. Or in stead of both these waies, you may cause thre little nails to be set on the backeside of his portsmouth, and it shal be as good. But beware in any wise that ye seek not to correct this fault, by putting any iron engin within the horses mouth, as some men do which wil cause a bit to be made of purpose, hauing the one side rougher than ẏ other: which is the high way to distemper the horses mouth, and to make him

so

so as he shal neuer stay wel vpon any bit. Notwithstanding a scatch welted on the inside is verie necessarie sometime for such purpose, as I wil shew you hereafter, when I come to speak of the diuersitie of bits, and whereto they serue.

The fift correction.

IF he wil not turn on that side that you wold haue him, then let him turn on ỹ other side, as he wil himself: & after that he hath begun, let him not leaue. But beat him vpon ỹ head betwixt the eares, & al to rate him with your voice, forcing him to turn continually on that hand, so fast as hee may driue, euen till he be almost out of breath & ready to giue ouer for very wearinesse, & you shal see, that with a litle helpe, hee wil be easily intreated to turn on the other side: which done, you shal make much of him: & being once wel corrected after this sort, it is possible that he wil neuer haue that fault againe.

The sixt correction.

GO into some soft ground newly plowed with deepe furrowes, and there first pase him faire and softly to and fro, the length of a manaeging course, then followe on with a good round trot, and when hee will not turne on that hand that you would haue him, al to rate him with a terrible voice, & beat him with a cudgel vpon the head, betwixt the eares, & vpon both sides of the head, and most vpon that side wherof he is most easie to turn, prouoking him to turne the other way: which if for al this, he wil not do, then without any respect, sometime runne him, sometime trot him, and sometime gallop him, as fast as hee may fling, now right out, now ouerthwart, & now round about as you your selfe shal think it most needful, not leauing to beate him, nor suffering him to rest in any place vntil you haue gotten the maisterie. And though he chance to arme himself to run awaie with you, whether ye wil or not, neuer care for it, but rather correct him so much ỹ more with your voice, in rating him, and crying out vnto him, & afterward stop him; prouoking him, in that your anger, once againe to turne: which if he will not do,

then renue again the self same correction, not leauing him vntil you haue made him to turn as he should doe. And to the intent that in his turning, he rear not right vp, you shal beat him with your rod from time to time betwixt the forelegs: but if he turne fréely about without stop or stay, then make much of him, sufferinghim to pause a while: that done you may pase him to and fro faire and softly, and so often as he wil not turne orderly, vse such hastie correctiõ as before. And in so doing, I doubt not, but you shall breake him of that fault the first day that ye shal so ride him: yea, perchance in lesse than an houre: for there is no way to be compared to this. But when you begin to take this way, you must determine with your self not to depart ỹ field, though you tarry there from morning vntill night, vntill you haue clean broken him from that fault. For otherwise you shall confirme him in his stubbornnes, & make his fault incurable. Thus we haue spoken hitherto of single turnes: it resteth now therefore that we talk somwhat of whole turns & double turns: for we shal haue occasion to talke more of single turns when we come to treat of the order of maneging.

## Of the whole turnes and double turnes, how and when to teach your horse to make them. Chap. 17.

AFter that you be come out of the rings and that your horse hath stopt, aduanced, and pased a while, in such place and order as is aforesaid, then whilest he is quiet, and standeth euen with his body, giue him two whole turns on ỹ right hand, one immediatly after another, helping him with your tongue, or with your rodde vppon the contrarie shoulder, or else with the calfe of your left legge, and seldome with your spurre. That done, giue him other two whole turnes on the left hand, vsing like helpes, and then two turnes again on the right hand, and then stay a while, making much of him. And see that in his turning, he bring ouer the contrary leg orderly, and that in closing his turne, he set his head euen where it stood at the first. And note here, that you may begin the double turnes two maner of waies, for you may chose whether you wil haue him turn at the second or third bound of his aduancing, or else at the first bound

which

which in déede requireth not so much obseruance of time & measure as the other doth.

But if your horse be not very apt vnto the double turnes, it shal not be amisse to ride him into some long lane or way, and at the hither end therof, immediatly vpon his stop, to giue him one or two whole turns faire and softly on the right hand: that done, to put him gentlie forward about twoe paces, and there to giue him the like turnes on the left hand, & then to goe two paces further, and there to turne him againe in like manner on the right hand, and so to follow on in turning him stil at euery two paces end helping him alwaies with your tongue, with your rod, with the contrary leg or spurre: yea, and if néede be, with the closing stroke of both spurs. And when you are come to the further end of the lane or way, giue him three whole turnes, whereof ỳ first and last must be on the right hand, and so leaue off for that time. But note this by ỳ way, that whensoeuer he failech in so going, to turn wel on any side, that then you must turn him againe at the next two paces end on the same side, & also correct him with the contrary spurre, continuing stil so to do, vntil he hath amended his fault: which if he doe, you shal make much of him. And if the way or lane be short where you breake him, then being come to the furthest end thereof, you may turne backe againe in the selfe same path, vsing the former order in making him to turne at euery two paces end, so long time togither as you shal thinke meet. After this, you must seeke to make him swift in his double turnes, for it is not enough to bring ouer the contrary legge orderly, and to turne truly and decently, but also hee must turne swiftly and roundly, for which intent you shal vse this order following.

Make him to trot or gallop the length of a short Cariere, and there stop, causing him to aduance once, twice, or thrice togither: that done (helping him with your voice and left spur: yea, and if néede bee, with the closing stroke) first turne him softly on the right hand, setting his head that way his taile stoode, which shal be halfe a turne, and there stay awhile, then close it vp with another halfe turne on the same hand, setting his head and al his body in the same path euen as it was at the first, and then make him

to do as much on the left hand, and so to change from hand to hand, ending alwaies on the right. And by often soliciting him in this sort, you shall not onely make him to turne swiftly, but also loftily, or of an indifferent height, euen as as you list your selfe. And when you sée him ready enough in this, then you may cause him to close ỹ whole turne roundly together, without making any stoppe or stay at the first halfe turne. If your Horse know how to handle his forelegges, then giue him on ech hand two whole turnes, allowing two halfe turns to one whole turn, and at the end of euery third halfe turne, helpe him with your tongue, rod, or contrarie spurre, and if néede be with the closing stroke, so shal hee close the last halfe turne, both quickelie, roundly, and comely: but as the two last halfe turnes would be done spédily, so would the two first halfe turnes bee doone leisurely. For in those it sufficeth that the horse do goe orderly with his legges, and kéep the right path. And by obseruing this order awhile, you shal sée hee wil be so swift and readie in the first turnes, as in the last. Notwithstanding, for a good time you shal not vse to hasten him, but only at the closing of euerie whole turne. And when he can once make all the turns in such order, and so swiftly as they should be done, then ordinarily giue him on ech hand three whole turnes, whereof let the first be so faire and softly as may be, so shall hee carrie his forelegges orderly, and be better able to kéepe a swift time and measure, in accomplishing the other two turnes. And though that any of these two waies heretofore prescribed, is maruellous good to make any Horse be he neuer so dull, to be readie, and nimble in the double turnes: yet must you be able to discerne by your owne discretiõ which of them is most mét for euery horse, and for what purpose. For if you would haue your horse to yarke in making ỹ double turnes, this way is not so méete for that purpose as the first, for in euery halfe turne you must helpe him to yark once: so that in euerie whole turne he shal yarke twise. That is to say once forward, and once backward: which he cannot do, vnlesse he pause somewhat at euery halfe turne, according to ỹ first order before taught. But if your Horse be hard and dull of the spurre, and vnapt to the double turnes, then if he can bring ouer ỹ contrary

trarie legge, ride him into some straight way, or else into the plaine field, and there make him to turne so fast as hee can, and helpe him continually with your spurres, beating him therwith in such sort, as he may haue bloudy sides, by the girthes: and giue him on each hand seuen whole turns or thereabout, obseruing alway that number wherwith you first begã, helping him also with your rod on the contrary shoulder. And although hee seemeth as then to care but little for it: yet in riding him again the next day following, when his sides shal be sore by meanes of the former prickes, being then cold and tender, and not hot, as they were the day before: you shal see that the spur wil quicken him after another sort, and make him to remember wherfore he was last corrected. And so by vsing afterwarde the ordinarie helpes, you shall make him so ready in the double turnes as you wil desire.

And you may vse like order also, when the horse is very liuely and sensible of himselfe: sauing then you shall not néede to ride him againe the next day following For the first time shall suffice to make him obedient to your will, and make him kéepe such measure and time in his turning, as he ought to doe. It is good also, if the horse be slowe, sometime to trot him out at the length of a short maneging course, and when he cõmeth toward the ende thereof, to gallop him, and at the stoppe cause him to turne the first halfe turne, and then immediatly vpon the same, to close the other halfe turne on the same hand, and then make much of him, suffering him to pause a while: yea, and it is possible that without pausing at all, you shal perceiue such a readinesse in the Horse, as you may followe on with another whole turne, and so to giue him on ech hand two whole turns, remembring alway to hasten him with your tongue, so much as you possible may, which shal not only make him readie in his turns, but also to know the very meaning of the helpe: which after that he hath once obtained, you shal néed no more to giue him these maneging courses: for then he wil turne at any time that you wil haue him.

Helpes and corrections meete to be vsed for the amending of such faults, as most commonly happē in making the whole or double turnes. Chap. xviii.

IF your horse at ẏ closing of any turne vseth to swarue of any side, thē a litle before he stop, or else in his very stopping, strike him with the calfe of your leg on the same side, & if nēd be, with your spur, pricking him more or lesse as you shal se it nēdfull, & that shal force him to make a iust stop, & to kēp ẏ right path: so as afterward he shal nēd no such help being indēd superfluous. But although he can stop wel, & be verie readie of turn: yet whēsoever he doubleth, helpe him alwaies with your tongue, and sometime with your rod, and leg: and that shal hasten him, and make him to go swiftly about, and to close well.

If your horse faltereth with his legges in his turning, for fault of not bringing ouer the contrarie legge, or lifteth not his fēet orderly, or turneth not fast inough about, then euerie time that he hath ended his turne, stay there: & so soone as he is staied, if his turns were not wel made of any side, first strike him once or twise with the spurre on the contrary side, then giue him as much with the spurre on the other side, and last of al on the same side that you strooke him first, and kēping him stil in the same path, turn him again as you did before, and at the last you shall se, that by this correction he wil amend his fault, and so doing, you shal make much of him.

But if your horse in doubling, maketh his turnes too much forward, and you can by no ordinarie meanes bring him from it, then ride him with his head toward som wall or trē, & when you are within a verie litle of the said wal or trē, stop him, and turne him, forcing him alwaies to close his last turn toward the wall or trē, so shal he be forced to kēp stil one place in his turning. Or you may, if you wil, without any wal or trē correct that fault, by bearing a stiffer hand on him, thā you wer wont to do: but so, as you dissemper not his mouth: & lok how much ground that he incroched in closing of his turne forward, when he hath done, make him to go as much againe backeward. Or you may correct him thus: ride him into some wet ground, newe plowed with dēpe furrowes, and there pase, trot, or gallop him ẏ length of

of a maneging course, vntil such time as he hath made a plaine path and beaten out euident marks of stop, and there cause him to double: and you shal see, that after the first time, he wil not be so hastie in pressing forward, because it wil grieue him to leaue the beaten path, to plunge into the mire. And looke as ỹ making him to go backward, wil correct him of his stealing forwarde, so you may correct his reeling backewarde in his turning, by making him in the ende to go as much forward. You may also correct both faults thus: if he gird forward, then make him to double in a plaine ground at the foote of some hil, and to close his turne vpward toward the hil. And if he reele backeward in his doubling, then cause him to close his last turne from the hill ward.

## Of the Chambetta. Chap. xix.

But besides al this, there is one other point belonging to the turnes, as well single as double, but specially to the single turnes of a manege which giueth a better grace vnto them than any thing else and that is, when the horse holdeth vp his forefoot on that side he should turne, whilest hee bringeth ouer the contrarie legge, and setteth it not downe againe vntil he hath closed his turne: which act Grison calleth Lacrambetta, for by this meanes hee shal carrie both his forefeete cleane aboue the ground, and turn a great deale better than when he traileth his feet vpon the ground. For which feate, for that in our tongue we haue no proper name, I wil therfore cal it from henceforth the Chambetta, and you shal teach your horse to doe it in this sort: ride him into some narrowe way, or cause a dike to bee made of purpose, in maner and forme following. First let it bee so long as a common maneging course, not aboue 9. inches deep and in the bottome one foot and a half broad, frō which bottome, the two sides, & the two ends of the dike must rise shoring: so as it may be a great deale broader aboue at ỹ brinks than beneath, hauing the very fashion of a trow boat, or pūt: or if you wil, you may make it of a greater depth, but it must haue bredth in ỹ top accordingly: and the rider must be the more circumspect as wel

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in bearing his bridle hād, as in timely helping of his horse. The dike then being thus made, ride into it, & there giue your horse on ech hand two or three turnes, wherof alwaies let ỹ first bee faire and softly, to ỹ intent that he may close ỹ others more spēdily, according to ỹ order of doubling, as I taught you before: & you shal sée that in closing his turns, ỹ narrownesse of the rome shal so trouble him, as for feare of knocking his contrary leg against the other, he shal be glad to lift vp ỹ other leg, & so to come aloft with both legs together aboue the ground: But you must beware, that in stead of lifting vp his legs, hee rēleth not backward, nor in his turning goeth clean out of ỹ dike: for that were a foul fault, and much against your purpose, & therfore you must beare a temperate hand, and be ready to vse such kind of helps, corrections, and cherishinges, as are mēt and necessary in that behalfe, and haue bēne heretofore taught. And to make him the more ready therein, you may often pase or trot him to and fro, in the dike, & turn him at ech end on both hands, or but on one hand onely, chāging hands at euery end. Yea, and somtime it shal be good to turne him in ỹ same dike at euery two pases ende, as I taught you before, speaking of the double turnes: and hereby the horse wil take such a custome, as hee wil do the like whensoeuer you shal prouoke him thereunto, by helping him either with your tongue, or contrary spurre, or with both spurs together. And in stead of this dike, you may if you wil, sēke out some narrowe golled way by rage of water, which wil be as good, so that it bee neither too dēep, nor too shallow, ỹ sides whereof would be somewhat shoring: yea, both such golled way, dike, & euery other way where you pase or trot your horse to and fro, should be the better if ỹ ground at the stopping place were somwhat hanging down the hill: so should it kēep him frō going either forward or backward in his turning: Also if your horse haue bin somwhat broken before, and know what correction is (otherwise it wil be too hard for you to do) you may teach him ỹ Chambetta standing still in the stable in this sort. Take a sticke in your hand, & go and stand on the right side of the horse, hard by the manger to ỹ which he is tied, and knock him with your stick on ỹ right fore leg, somtime vnder ỹ knée, somtime in the midst of the shank, somtime on the

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nether ioint, and somtime behind on the bowing of ỹ ham of the same leg, helping him continually with your tongue or voice, in saying vnto him, Hup, hup: and neuer leaue him vntil you haue made him to hold vp that leg: which when he doth, beate him no more, but onely threaten him by wagging the rod, to the intent he should not set down his foot, but hold it vp stil, so long as you shal think it good. And so often as he setteth it downe vnbidden, help him and correct him as before, neuer leauing vntil he hold it vp againe: which whilest he doth, you shal do wel to make much of him, by clawing him with your rod on ỹ withers, for that shal encourage him to do ỹ like another time. And if you would haue him to do the like with the left leg, then stãd on his left side, and vse the selfe same order. And when you sée that he wil doo it with both legs only for fear of the sticke, then you may also teach him to do it for feare of ỹ spurre, in this sort. Stand on his right side with the rod in your hand, and cause another to stand on his left side with a spur, naile, sharp stick, or goad in his hand, and in the same instant that you do beat him with your rod on the leg, let the other prick him in the common spurring place with ỹ spur, helping him with the sound of his tongue, or with his voice, as before, you holding your peace: and so soone as the Horse shall heare that sound or voice, and féele the stroke both of rod & spur, he wil lift vp his right legge: which when he hath don, you shal change sides, and in ỹ same sort make him to doe as much with his left legge. And thus vsing him a while, you shal make him to lift vp which you wil, so soone as he shal heare but ỹ sound of your tongue or voice, and féele the spurre on the contrary side, without the help of any man to stand by him with a rod in his hand: yea, and to holde it vp stil a quarter of an houre together. And perhaps many times he wil doe the same without the help of the spurre, being afraied to set it downe, so long as you are there present. But if (as it happeneth many times) the Horse when you prick him so with the spurre, wil not lift vp ỹ contrary legge, but only ỹ legge of the same side that you spurre him: then in the same instant that you spurre him, if hee be not curst, and shrewd, strike him with your foot on the contrary legge, which warning wil make him remember himselfe. Or else for a

more

more surely, you may haue a sticke in your other hand & knocke him therewith on the inside of his contrary leg: and beside that, euery time that hee so erreth, either in not lifting vp ỹ contrary leg, or else in lifting vp the other, remember alwaies to double the stroke of the spur, and that shal so correct him, as afterwards if you doe but make an offer to touch him with the spurre, it shal suffice to make him to hold vp the contrary leg, so long time together as you will your selfe. Neither care you for ỹ frowardnes of any horse, but the more froward he is, the more roughly correct him. But though your horse in this sort may learne the Chambetta in one day: yea, and perchance in lesse than three houres: yet to keepe him in vre withal, & that he may do it afterterward the more readilie in his maneging, it shal be necessary to spend euery day one houre with him in the stable, in making him to hold vp first one legge, and then another. Thus when you haue taught your horse to doe the Chambetta in the stable, you may also teach him to do it abroad, being vpon his backe, in this sort. When you are mounted, cause him to stand stil a good prety while together, and beare a steddy hand vpon him, making him to reane truly with his head, and appoynt a footman to stand on your right side, with a sticke in his hand, and in the same instant that you help your horse with your tongue or voice, let the footman beate him vpon the right legge with his sticke, not leauing so to molest him vntil he lifteth vp his foot, which doing you shal make much of him, by clawing him on ỹ withers. That don let the footman change sides, and make the Horse do as much with his left leg: and when the horse vnderstandeth those helpes, then besides ỹ help of your tongue or voice, you may touch him also with your contrary spur: which if it doth make him to hold vp the true leg, then spurre him no more, but make much of him, & when he knoweth once the helpe of the spurre, you shal need no more the helpe of ỹ footman with his rod: for then if he erreth at any time, by helping him with your tongue or voice, & by doubling the stroke of your spur, you shall quickly make him to amend his fault. And besides these helps for ỹ more suretie if need be, you may haue a rod in your hand, and correct him therwith your selfe, like as the footman did before: but I beleeue that after

a little

a litle exercise (if the horse be not too dul) ỹ helpe of your tongue and the mouing onely of your contrary leg wil suffise, without any more busines. And to kæp him in vre withal, remember alwates whensoeuer you take his back to make him hold vp first one leg, and then another; so shal he afterwarde be perfect when he commeth to be maneged, either with single or double turne: but he shal do it the more readily in a double turne, if he be vsed to do it first in the single turne. It shal bee very necessary also to trot him, to gallop him, and to turne him to & fro in some such way as is before described: by meanes whereof, if the horse be of any gentle nature, and therwith somwhat staid of head, he may quickly learne the Chambetta, without the helpe of any of the former inuentions, which notwithstanding are necessarie for thiftes sake, to answere the diuerse qualities of horses: for all horses wil not learne alike. Thus hauing taught you the order of treading the ring, of stopping, of aduancing before, of parking behind, of turning, with single turne, and double turne: yea, and that with the Chambetta also, I thinke it now mæte to shew you the order of maneging, and how many kinds of maneges there be.

## Of maneging, and how many kindes of maneges there be. Chap. 20.

This Italian worde Maneggiare, is as much to say in English, as to handle with skil: as when wee say, hee can handle his horse or weapon very well: and amongst the Italians it is taken as a generall word, comprehending foure especiall kindes of maneging: whereof one is, when they make their horse to double his turns, which they call Raddoppiare: another is, when they make him to gallop the field, going in and out, as they do in skirmish: the third is, when they make him to leape aloft, and to fetch diuerse faultes: the fourth is, when they pase, trot or gallop him a good while to & fro, in one selfe path, the length of xx. or xxx. pases, or thereabout, turning him at each end therof, either with single turn, whole turn, or double turne: which Grisõ calleth, Maneggiare a Repoloni. But we English men do onely cal this last kind a manege, and that absolutelie

without

without any other addition. For amongest our horsemen this word manege or maneging, signifieth no other thing, but only that foresaid kinde of galloping and turning to and fro in one selfe path. And therfore we vse commonly to say, This horse can manege wel, or make a good manege: whereof there be also three kinds, that is to say, manege with halfe rest, manege with whole rest, & manege without rest. Which Grison termeth thus, Manegio a mezzo tempo, a tempo, & contra tempo. The manege with halfe rest is, when you cause your Horse at ỹ end of euery maneging path, after he hath stopt, to aduance twice together, & at ỹ second bound to turn: whereby you rest alway one bound. The maneging with whole rest is, when you turne him at the third bound, and so rest two bounds. The manege without rest is, when you turne him immediatly vpon the stop, without any tarriance at al: which only kind of manege our English riders most commonly do vse, and not ỹ other two. Notwithstanding, they bee very necessary and méete to bee vsed, according as the horse is strong or weake. For a very strong horse requireth the manege with the whole rest: & a horse of an indifferent strength the manege with the halfe rest: and a weake horse the manege without rest. But ỹ manege with the halfe rest is most necessary of al, and the best meane to make a Horse perfect in the other two. But note, that in all three kinds of maneges, you must obserue wel those general preceptes that I gaue you before touching the single and double turnes. That is, to see that your horse kéep alwaies one path, and one place of stop, and in his turning that he kéep his ground, and carry his head, necke, legs, & whole body orderly, without prelling forward, or réeling backward, or swaroing on either side: and also that he close his turne roundly, and in so narrow a rome as may bee. And finally to see that as well in his turnes, as courses, hee kéepe alwaies like time and measure, and that the one be not swifter than the other, and such like. Al which things, by vsing such helps & corrections as I haue partly already, and shall hereafter more at full declare, you shall easily make your horse to doe. Thus hauing shewed you how many kindes of maneges there be, and which they bee, and what you must generally obserue in teaching them, I will

now

now declare vnto you the order of them al, beginning first with the manege of the halfe rest.

## Of manege with halfe rest. Chap. xxi.

When your horse can stop well, aduance before, & turn readily on both handes, then being come out of the ringes, trotte him right out, either in the middle furrowe vnto the common place of stoppe, or else in some other soft ground, the length of xx. paces or thereabout: and euen as hee is ready to stoppe, helpe him with your voyce, making him to aduance twice together, and at the second bound, turne him on the right hand, helping him with your tongue, with the reane of his heade, raine or false reane, with your rod, with the calfes of your legs, or with your spurs, more or lesse, according as occasion shal require, and see that in his turning he moue his fore parts orderly, staying himselfe vpon his hinder loines, bowing his houghes decently, which is ỹ beauty & chiefest grace of his turn. That done, immediatly trot him backe againe in the selfesame path, vnto ỹ place from whence you came. And there, after stop at the second bound of his aduancing, turn him on the left hand, and so follow on, obseruing the like order, vntill you haue gone to and fro about twelue times, changing handes at euery time. And at the last stop of al, you shal cause him to aduance twice together & so depart: and this is the order of the manege with halfe rest. In ỹ which, after that he hath bin somwhat exercised, you shall not need to helpe him when he is ready to stop, but only to beare a steaddy and straight hande, and to helpe him with your tongue or voice in his turning. And you shal see, that he of himselfe wil turne roundly & with a good grace, without any more helpe.

## Of manege with whole rest. Chap. xxii.

When after that hee can make the manege with halfe rest well, if hee bee of much force and verie light withall, you may teach him to make the manege with whole rest, causing him at euery stoppe to aduance thrice together, and at the third bound to turne, and at the last stoppe of all, to

aduance

aduance againe thrise together, and so to depart. But vnlesse he be verie strong indéed, I would wish you to turn him most commonly at the second bound, rather than at the third: so shal he bee able to turn ẏ more readily, and to kẽp the better time & measure in his turning.

## Of manege without rest. Chap. xxiii.

BVt if your horse be of no force, or of a heauy mould, then you may teach him ẏ manege without rest, by turning him suddenly vpon ẏ stop, wherin also he shal neuer be perfect, vnlesse he be first vsed to ẏ manege with halfe rest: but remember that in ẏ manege without rest, you cause your horse at ẏ last stop to aduãce once at ẏ least. For it is none error at al, but a comly sight in al thrée kinds of maneges, at the last stop to aduance twise or thrise. And note, that in all these 3. kinds of maneges, it is prayse worthy, when ẏ horse in his aduancing doth bow his houghs behind, & turneth round with ẏ Chãbetta. For which purpose it were not amisse to manege him somtim in such place, wheras ẏ ground is at ech end of ẏ maneging path somwhat hanging. Note also, that in maneging your horse, it is no small help vnto him in euery turn that he maketh, to accompany him with your persõ in this sort following. Whẽ he turneth on ẏ right hãd, turn you your left shoulder towards his left ear, more or lesse as néd shal require, kéeping your body for al that stil right in ẏ midst of the saddle, so as ẏ reines of your back may directly answere ẏ ridge bone of his back. Neuertheles, whẽ you féel him to bend his hinder houghes, then lean you somewhat backward, for that shall make him to close his turn ẏ more roũdly & swiftly. And when he turneth on ẏ left hand, accõpany him with your right shoulder toward his right ear, obseruing like order as before. If your horse be very weak or féeble, either by nature, or by ouermuch trauel, then it shal be good sometime to manege him with a soft pase, and not to trot him, vsing him for the most part to that kind of manege which shal be most mét for his strength, least by often changing, you clean disorder him, and he neuer become perfect in any of them. When your horse can make all these thrée

kinds

kinds of maneges, both with soft pase, and with trot: then you may manege him in any of the said kinds with a gallop, giuing him on ech hand but one single turn, and see that the first and last be alwaies on the right hand. And a little before you turne him, remember to hold your rod on the contrary side, whereby your horse shal know on what side to turne: and at the stop make him to aduãce, helping him with your voice, or with your rod, or with the euen stroke of your spurs, or of ẏ calfes of your legs. And in two of the foresaid kinds of maneging, if your horse be ready of his hẽles and light behind, you may also make him to yarke, as wel at his stop, as in his turne: that is to say, in the manege with halfe rest, and in the manege with whole rest: for in the manege without rest it cannot be decent. But in the other two you may at the first or second bound of his aduancing, help him with your voice, rod, or spurres, to yark there once, and at the closing of his turne to yarke againe: so as at euery end of the maneging course, he shal yarke twice, once forward & once backward. Or if you wil, you may cause him to yarke at ech end but once, and that would bee at the closing of his turne, setting his head that way that his taile before stood. But before you gallop him, it were good to pase him, and to turne him faire and softly in the same path to & fro, about twelue times: which shal make him the readier when he is afterward maneged with a gallop, yea & if you did ẏ like, after that you haue maneged him with a gallop so that you first suffer him to breath a while, it should do him no harme, as you shal wel perceiue if you manege him againe the next day following. And beware that in maneging your horse, ye gallop him not at ẏ first too swiftly: for so shal he neuer be able to continue with one time and mesure, neither in his courses, nor yet in his turnes: for after a while euery one shal be slower than another, which would be very vnsemely, & therefore good respect would be had to the quality of the horse, whether he be able to endure a swift manege or not. For if you perceiue that he is naturally strong, and hath a good mouth, and can turne readily on both hands: then you may be the bolder to giue him a swift manege: but if he be too liuely, or else be laden with great chẽkes, or hard of mouth, or if he be feeble of backe and legges, then al-

beit he seemeth to haue a gētle mouth, by means perhaps of good breaking, yet you must gallop him with the more respect. Notwithstanding, if he hath strength in his backe & loins, then the other defects be not so much material, but that with good breaking he may may be maneged any manner of way: but the surest way for al maner of horses is, to manege him with a soft pase, or with a trot, and seldome with a gallop.

And note, that if there be any stones in the maneging path, or on any side of his stopping place where he turneth, it is not good to take them away, for ỳ feare thereof shal make him to lift his feet the better, and to go the more surely: yea, if there be none at the place of turning, it were necessarie to put one or two great ones: for the feare of those stones would make him to turn with ỳ Chambetta. When your horse is perfect in all ỳ things aboue said, then if you will, you may manege him somtime in and out: like the writhing of a serpent, ~ but vse it not often, and specially with a young horse.

Hitherto we haue spoken of maneging with single turns: now therefore we wil talke a litle of maneging with double turnes.

## Maneging with double turnes. Chap. 24.

Although maneging with the double turnes appertaineth rather to the stirrer, than to the horse of seruice, yet it shall not be out of time to talke thereof in this place.

And note, that you may teach your horse to manege with the double turnes two manner of wayes, whereof the first is in this sort. Pase him or trot him right out, the length of twenty or thirtie pases as you did before: and when you come to ỳ place of stop, let him aduãce once, twise, or thrise together, according as the kind of manege, which you wold haue him to make, shal require, giuing him there a double turne, and halfe a turne on the right hand, which maketh in al fiue single turns: or if he be very strong, you may giue him two double turnes, and half a turne on ỳ right hand, which amounteth to nine single or halfe turns. That done, trot him backe againe in the selfelame path, and giue him the like number of turnes on the left hand, and so follow on still, continuing the same order so longe as you thinke

your

your Horse can wel endure, and then at the last stop make him to aduance twise or thrise together, & so leaue. The second way is thus. When you come to the place of stop, giue him at ỳ first but halfe a turn on ỳ right hand, and suddenly changing hands, let him close the double turne on the left hand: that done, trot him backe againe in the selfe same path, vnto the other end, and there likewise giue him halfe a turne on the left hand, and immediatly let him close the double turne on the right hand, and so to follow on with double turn, and halfe turn, mockt throughout: and at the ende let him stoppe and aduance, as before is said.

And note, that in both these waies of maneging, in the beginning, the turnes would be made faire and softly, to the intent ỳ horse may carry his legs the more orderly. When your Horse can double, being maneged with a soft pase & trot, then you may make him to double after one of these two sorts, being maneged with a gallop, which must be more or lesse swift according as ỳ horse may endure, and be able to kéep the like time & measure, so wel in the courses, as in his turnes. For ỳ double turnes and specially two on ech hand, do straine a horse, his loines & sinewes very sore, if he be weak or not very light of nature. Wherefore if your horse haue any such defect, & yet you would haue him to double in his manege, then for a while, let him vse to make on ech hand but one double turne: so shal hee turne the more roundlie, and close his turns the better, yea, and with ỳ more strength of his back, which wil not decay so soon with that, as with making two double turnes: and in processe of time it is possible that you shal make him to turne so often together, as you wil your selfe. But if he be of so grosse a mould, as he is not apt to close his turn wel, then vse him in no wise to double, lest that he neither make double nor single turne as he ought to do.

## Of the helps and corrections which are meet to bee vsed for the redresse of such faults, as commonly chance in maneging. Chap. 25.

And first, as touching the ordinarie helpes, I say, that if your horse haue béen wel broken before, and taught to turn readily on both hands (as hee ought to be before you manege

him) then he néedeth the lesse helpe: for so soone as he shal heare the sound of your tongue or voice, and féele the slaying of the bridle, hee wil not tarry to bee spurred, but turne roundly of his owne accord: notwithstanding, according as he is more or lesse sensible in the beginning of every maneging course that he maketh, it shal not be amisse to helpe him with the euen stroke of your spurres: yea, and also to do the like a little before hee commeth to the place of stop, helping him also with your voice, for that shal make him to close his turne with the better grace. But if he be dul & heauy, then it shal not onely bee necessary to helpe him in the beginning of ech course, but also in ỹ midst, and likewise at the end of the same, in such order as is aboue said. And in his turning, remember to help him when néd is, with the contrary legge or spurre, and sometime with the closing stroke of both spurres, as you haue béene heeretofore taught. And when your horse goeth out of the way, and wil not kéepe ỹ right path, then correct him with your rod, striking him vpon the flanke, or with your spur vpon that side that he swarueth. If your Horse be young, and not growne to his ful strength, it is possible that sometime for his owne ease, hee being come to the place of stop, wil turne sooner than he should. Wherefore you shal do wel at ỹ stop to make him aduãce twice or thrice together, and then to stand stil a while, making much of him: that done, help him with your voice to turne, wherein if he also make too much hast, and kéepeth no time, stay him againe vppon the same another while, and so you shal quickly bring him from that fault, & make him to manege with what time and measure you wil your selfe. And if your horse haue that fault by means that he is ouerliuely, & too rash, there is no better meane to bring him from it, than by bring him vnto ỹ manege with whole rest and to stay a prettie while together, after that he hath aduanced, making him alwaies to turn low by the ground, and to bring ouer the contrary legge, or to turn with a Chambetta. Againe, there be some horses so froward, and so spiteful, which (by meanes of euil breaking, & ouermuch beating) when they come to ỹ turning place, will make either too large a turne, or else without time or measure. For correction wherof, vse to manege him with a soft

pase,

pase, vntil he be almost within his length of the turning place, & then trot him swiftly, or gallop him vnto the end: whereas, after you haue giuen him a turn truely closed on ỹ right hand, stay him awhile, that done pase him forth faire and softly, vntill he be almost at the other ende, & then gallop him to the place of stop: whereas, after he hath turned, stay him again like as you did before, and so continue, maneging him stil after that sort, vntil you haue gon to and fro eight times, and at the last stop, make him to aduance: or if you wil, you may after his first turn, first pase him two or three steps, then trot him swiftly, vntil he come somwhat nigh to ỹ end, and from thence gallop him to ỹ place of stop, obserning that order in euery course from the beginning to ỹ ending: & afterward being somwhat amended of his fault, you may after the stay vpon his turn, vse to gallop him all the way, for a certain season, vntil he be throughly perfect in his turne: which when he is, see that you stay him no more vpon his turn, but immediatly put him forward. For to stay vpon ỹ turn, is vnsemly and not to be allowed, but onely for corrections sake. There be many horses which through euill breaking when they are maneged, wil turn their rumps and hinder loines, before they turne their foreparts: for remedy of which fault, you shal vse these waies following.

Trot him right out in the furrow of som new plowed ground, correcting him continually, and that not onely in his going, but also when he is ready to stop, and likewise in his turning, sometime with the contrary leg, and somtime with the contrary spur, & if that wil not suffice to make him leaue his fault, then manege him alongst by some wall or tilt, and ride so nigh vnto it as you can. Which wal or tilt, in the first course would be on your left hand, and in the second on your right hand: and so changing from hand to hand, help him in eche turn with the contrarie leg, or spurre, more or lesse, according as neede shall require: or else manege him in such a fashioned dike, as I haue before described for to teach your Horse therein the Cambetta. And by one of those waies, you shal make him to amend his fault, and to turn orderly, as you would haue him.

If your Horse in his turning vse to writhe his body on that side

he turneth as though he would fal down, which is a very foule fault, then manege him oft with a swift trot, either in the furrow of some new plowed ground, or else in some pathe ouerthwart the furrowes: and at the first, turne him alwayes lowe by the ground, helping him with such helpes and corrections as are before taught, so shal you bring him to make a true turne, and iust in euerie condition.

You may also correct him for ỹ selfe same fault, or for making too large a turne, by giuing him a chocke with the bridle on that side of his mouth that he so erreth. And for ỹ most part such writhing turnes do chance in the manege without rest, wherein as they are vnseemly to many mens iudgements, so are they much more vnseemely in the other two kinds of manege: Notwithstanding if your horse be weak and feeble, then somwhat to ease him, you may sucker him whilest he boweth his houghes behind in his stopping, to wry his body a hand breadth on that side that he turneth, so shal he close his turn the more readily, but otherwise see that ye vse it not.

But if your horse in any of the maneges make a false turn, or turneth higher or lower thã you would haue him: as for exãple on the right hand, then so sone as he hath turned, euen in his going forward, correct him once or twise with your left spurre: yea and if nede be, with both spurres at once, and being come to the other place, turne him againe on the right hand, & so followe on with your manege vnto the place where he turned first on the right hand, and there turne him on the left hand: by which changing of hands, you shall alter the common order of turning in maneging: which altering sometime is very necessarie, not onely for the correction of the faults aboue saide, but also to knowe the obedience and readinesse of your Horse. For if he be vsed alwaies to one order of turning, it is possible that he will not turn sometime on that hand that you would haue him: & if he make a false turne on the left hand, then correct him by obseruing the contrarie order.

There is some kind of Horse, which when you haue maneged him ten courses to and fro, he will in the end suddenly force your hãd, either by casting vp his head aloft, or by chopping it down,

and

and so fal a running not for that the bridle grieueth him, or for any great desire he hath to run, or to trauel, but onely for that he thinketh so to escape your hands & that you should trouble him no more, but suffer him to rest. Which fault so often as he vseth, see that you sharply correct him for it, without shewing him any fauour at all, not leaning to beat him vpon ỹ head betwixt the eares with a good stick, & to rate him with a terrible voice, shewing your self fierce & cruell vpon him, vntill you haue brought him vnto obedience, and made him to know that running away wil not help him. Which correction he should remember ỹ better, if it were his hap to deserue it, being maneged vpõ a groũd newly plowed with deep furrowes: the trauel wherin together with the correction, would be so painefull vnto him, as he would beware euer after how he ran away before his lessõ were ended. And hauing thus subdued him, leaue him not so: but manege him afresh, first with a round trot, and then with a gallop, according as you shall see him in breath: and in the end make much of him, by which so vsing him, you shal see that afterward he wil manege so long time together as you wil haue him, and likewise be readie to stop at commandement, yea, and if need be to stoppe in a Cariere, being run with an vnbirbled bridle.

## How and when to teach your horse to passe a swift Cariere. Chap. xxvi.

VNtil your horse be perfect in all points before taught, & specially that he can stop wel, & therwith aduãce before, aswel in his trot as gallop: I would not wish you in any wise to runne him, vnlesse it were in ỹ very beginning of his breaking, to giue him a Cariere or two onely to know his swiftnes & disposition, & so to leaue off, vntil he be better broken, & made meet to be run. Which when he is, you shal vse this order following: ride him into some fair plain sandy way, void of al stubling stones, & to acquaint him with ỹ way, pase him faire & softly ỹ length of a good Cariere which must bee measured, according as the horse is made. For if he be a mightie puissant horse, and great of stature: then the Cariere would bee the shorter. So likewise must it

be, when you would haue him to bound aloft in his Cariere: but if he be made like a Jennet, or of a middle stature, then the Cariere path may be ỹ longer, yet not ouerlong. At the end whereof let him stoppe and aduance, and at the second bound turne him faire and softly on the right hand, and so stay a litle while. Then suddenly saying with a liuely voice, Hey, or Now, put him forward with both spurres at once, forcing him all ỹ way to run so swiftly and so roundly as he can possibly, euen to the end, to the intent, he may stop on his buttocks. That done, turne him on ỹ left hand, and passe him forth faire and softly vnto the other end of the Cariere path, and there stop him and turn him againe on the right hand, as you did before, and so leaue.

And note, that the chiefest points to be obserued in the running of a Cariere are these: first, to see that the horse gather roundly, and go smoothly away, bearing his head steddily: secondly, that he run swiftly: and thirdly, that he stop lightly. Whereunto you shal bring him by no meanes so wel, as by often vsing him to tread the rings with a very swift trot, which shal make him so nimble of his legs, so swift and so staied of head, as when he commeth afterward to be runne, it shal be no griefe vnto him: which was wel obserued by ỹ great rider, M. Cola Pagano: who vntil he saw his horse wel staied of head, and thoroughly broken, he would neuer runne him. For, after that he had spent foure monethes, or halfe a peare, yea, perchance a whole peare in breaking him, in such order as I haue heeretofore taught, he would teach him to run in lesse then eight daies, and that so swiftly, so smoothly, so strongly, and with such a steddinesse of head, and lightnesse at stop, as it could not be amended. Yea, and when hee would haue an horse to excell, and be very fine indeed, hee would teach him nothing from the beginning to ỹ ending, but that hee should do it first perfectly wel vpon a soft pase: and then vpon a trot, and seldome or neuer vpon a gallop, vnlesse necessitie so forced, and aboue all things he wold be sure neuer to manege him with a swift gallop, nor yet to make him passe a Cariere. But after that he saw him perfect in ỹ rest, he would appoint him to his Rider, who could require nothing but ỹ horse was ready to do it, were it to manege with single turn, or double turne, or run

as

as many Carieres as ỳ Rider would haue him, with such order and time as it was maruellous to behold. And as I would not haue you to run your horse before he be throughly broken: so after that he can run, I would not wish you to exercise him therin aboue once in two monethes: yea, and if it were more seldome, the better, and specially if he be naturally hard of mouth. For nothing doth so temper an horses head and mouth so much as often running, and it greatly diminisheth his strength: and if his hinder legs be weak, it maketh him also to ouer reach, which is very perillous.

## The order of bounding aloft, or leaping, how, and when you shall teach your horse to leape. Chap. 27.

ALthough the rules before taught, doe suffice to make a horse of seruice: yet if your horse be light, a Cierer, and nimble of nature, you may besides these, for pleasure sake, teach him many other proper feates: As to bound aloft, and to parke withal, to gallop the gallop galliard, to fetch the Capriole, to do the Corsetti, and such like faults, whereof I purpose heere somwhat to treat, thinking it now mét so to do, and not before, because that vnlesse your horse be first perfect in ỳ former lessons, it were in vaine to teach him any of ỳ lessons following. And first, as touching leaping or bounding aloft, you shal vnderstãd that to do it with a good grace, & as it ought to be done, the horse had not onely nèd to be made light by Art, but also to be light by Nature: for in his leaping, he must aduance himself, gathering his body round together, and rise euen from ỳ ground, keeping his head alone staie, and in his due place: & when he leapeth hee must yack withal. Which if you would haue him to do at ỳ stop, you shal help him in his aduancing, and specially when he riseth aloft at the second bound, with the euen stroke of your spurs, and with your voice, yea, & with your rod also, by striking him therwith, sometime behind on the vnto rump, and sometime on either side of his rumpe, where he séemeth most to hang: and if he rise not lightly inough before, then beate him therewith vpon the right shoulder, by means of which helps, you shal sée him immediatly to bound clean aboue ground, gathering his body short together.

togither, & to park withall. And note by the way, that the helpe of the calfe of your legs, wil make som horse to rise higher thã the helpe of your spurs: therefore in such cases your owne discretion must be vsed. But in the beginning, so soone as he hath made one true sault or leape, and parked withall, forget not to make much of him, suffering him to stay vpon it a good while, without molesting him any more for that time: yea rather, you shall do very wel to light off his backe euen there. And so cause him to be led from thence faire and softly into the stable, or at ỹ least, if you wil not light off, to depart with a soft pase: so shall you encourage him against the next time to doe the like, or else better. For vntil your horse vnderstãdeth your mind, & knoweth perfectly ỹ order of leaping, and how to gather vp his body short & round together: it is not good to force him ouermuch, but onely at the end of his pase, trot, gallop, or Cariere, to help him, as I shewed you before, to make him two, three, or foure leaps, & no more, so shall they be both loftie and semely. Whereas otherwise, in making many, he may hap to do them faintly, lasily, and without any good grace: yea, and perchance not without danger of rearing right vp, wherin a hanging ground would do good seruice: but then at the first, it would not be too much inclining, or ouer steepe downe. Notwithstanding, if your horse be light and a stirrer by nature: you may take the more of him, and increase the number of his lessons as you shal thinke good: hauing then onely care that he kéep his ground, that he spring out on neither side, nor disorder his head but beare it steddily. In which things he must be made perfect before by often trotting ỹ rings in such order as is before taught. And thẽ being staied of head, you may by vsing ỹ former helpes, cause him in a lustie strong gallop, at euerie two pases end, to bound aloft, once or more, as you list your selfe, but so as he may do it wel, képing one selfe time and measure from the beginning to the ending, and that ỹ last leape be with no lesse force then the first, but with more force if it may be. And therefore the number of his leaps, and the length of his race wold be measured according to the horses strength, and as he is in breath, and able to endure. And this kinde of gallop is called, the gallop galliard.

And

And when your horse is once perfect, you neede not to gallop him but sildome, so shal he gallop the more strongly, which would be done when you come out of the rings. In the which, for that cause you must trot him at that time the fewer times about: and so you shal see that at his comming out he wil enter into his gallop with a lustie courage, and bound all the way of his owne accord, at euery two paces end, euen vntil he come to the place of stop: or at the least, if he doth not this, I am sure that helping him but onely with your voice, he wil not faile to fetch two or three leapes at the stop, without any more businesse.

How to teach your Horse to do the *Capriole* or Goats-leape, and the *Coruetti*, and also how to make him go sideling so well with his whole body, as with his rumpe onely. Chap. xxviii.

CApra, in Latine or Italian, is a beast which wee call a Goate, which beast being disposed to play, vseth in his running a prettie kinde of iumping and doubling with his legges aboue grounde, making a certaine semblance of parking, and yet parketh not indeed. Which kind of fault or leape because the Italians haue not onely counterfeited in their daunsing, but also haue taught their Horses to imitate the same, (for when the horse boundeth aloft, he must aduance his rumpe, & make as though he would parke, and yet doth not) it is called therfore by the name of Capriole, which if you wil, in English you may tearme ỹ Goats leape: but forsomuch as Goates bee not euerie where to represent that kinde of leap: I would wish you therefore for your better vnderstanding, sometimes to beholde your litle lambes whilest they run and play together, and you shal see them liuely to do the same.

The Coruetti, is a certaine continual pransing and daunsing vp and down stil in one place, like a beare at the stake, and somtime sideling to and fro, wherin the Horse maketh as though he would fain run, and cannot be suffered. The name is deriued of the Spanish word Corua, which is as much to say as the elbow or hinder heele of the horse, because in doing this feat he doth labour much vpon his hinder legs. Which kind of pransing the Spaniards do vse much vpon their Iennets, and specially when they

they ride short, after ỹ Turkie fashion: because in that sort it mas-keth the better shew, & they estéem it so much, as they cal ỹ horse that can do it wel, in their tong, Hazedor, that is to say, a doer.

Thus for the better vnderstanding, I haue thought good to interpret vnto you these two termes, Capriole & Coruetti: which two feats, because they do not much differ (as Grison saith) ther is but one order in teaching to be obserued in both. Wherfore if you would teach your horse to do ỹ Capriole, vse to trot him for certaine dayes vpon some long hil, or bãging ground, and stopping him vppon ỹ knoll of the hil, make him to aduance twise together: that done, immediatly help him with ỹ sound of your lips, to trot two pases further, & to stop, and to aduance againe twise, as he did before, and so to continue in stopping and aduãcing twise together, at euerie two pases end, al the length of the hil downward, and there stay. Thus vsing him a while, you shal sée, that afterward in stead of those two trotting steps, at euerie time that he stoppeth and aduanceth, if you help him with this word, Hup, and with your rod, he wil gather vp his rump twise together, & so go from stop to stop, aduancing both his forefete and hinder loines, with time and measure, carrying his forelegs orderly, and so fetch ỹ Capriole so oft times together as you wil: yea and by helping him with your rod a litle behinde, you may make him at euerie time that he so aduanceth with his rump to park withal. But note, that if your horse be weak and féeble in his hinder parts, it shal be best for him to make those two trotting steps low by the ground: or else in his lifting to obserue alwaies one time and measure, aduancing therwith orderly, without gathering vp his rump, which kind of Capriole is not to be dispraysed. In this sort if your horse be very light, & you your self therwith accustomed to ride short vpõ him, after ỹ Turky fashion, you may teach him also ỹ Coruetti: but if he be great of stature, and that you ride long vpon him after our fashion, then ỹ Capriole is most mét for him, which Capriole being done low by the ground, doth not differ much from the Coruetti, saving that in doing ỹ Capriole your horse must alwaies be going forward. But he may do ỹ Coruetti, not only in going forward, but also in kéeping stil in one place, whilest he standeth aduãcing vp

and

and downe vpon all foure fèet: yea, and sometime going backeward, and sideling, and euerie way. And to the intent he may do it the soner, it were not amisse somtime to make him go sideling with his whole body, by helping him with the contrary spur: as for example. When you would haue him drawe to the left side, then bearing your bridle hand euen and steddy, clap your right leg close to his belly, and holde it there stil, making him to fèele the spur on the right side: for the which, if you sée that he moueth his body such way as you would haue him, then suddenly pull away your leg from thence, & make much of him: that don, make him to doe as much on the other side, with your left leg, not leauing to molest him in that sort on either side, til you haue made him vnderstand the meaning therof. And so with a litle exercise, so sone as he shal fèele you to stay your bridle hand, and to offer to touch him either with your leg or spur, on the contrary side, he wil go sideling so much or so litle as you wil haue him. But if you would haue him go sideling with his rumpe onely, & not to moue his foreparts, which indèd is very necessary, & specially for a horse of seruice, to make him kèepe his head alwayes towards the enemie in fighting hand to hand: then besides ỳ foresaid helpe of the contrarie leg or spur, you must also turne your bridle hand somewhat on that side that you touch him. And you may also helpe him with your rod, by striking him therewith on ỳ contrarie flank behinde. Note also, that you may make your horse to doe ỳ Capriole, in giuing him a lustie gallop, if you can help him at euerie two steps to kèep time & measure. But as I saide before, vnlesse your horse be naturally light of his body, and nimble of his legs, it is vnpossible by Art to make him to do any of these things wel: & to say ỳ truth, they be thinges that may be very wel spared, and specially in horses of seruice, which being once vsed to such delighting toies, do forget in time of nèd their necessarie feats. For when they are spurred to go forward, or to passe a Cariere, they fal a hopping and dansing vp and down in one place. Likewise, when in their manege they should make a spèedy, round, and iust turne, either single or double, they wil not torn but leisurely with ỳ Coruetti: and therefore I would wish none of ỳ Quènes Maiesties Horses to be vsed to the Coruetti,

but

but such as are onely kept for pleasure, wherof it is sufficient to haue in her highnesse stable two or three at the most.

Thus hauing declared vnto you what is necessary, as wel for the horse of seruice, as for the Stirrer, and with what order to breake them: I thinke it méete also to shew you now in the end, how to ride such a horse, being once throughly broken in all the feats aboue said, to the best shew before a Prince or Noble man.

## How to ride a horse to the best shew before a Prince, & where best standing is for him to see. Chap. 29.

SOme do think it good for those ỹ wold sée, to stand right before ỹ stopping place, & som would haue them to stand on ỹ right hand of ỹ rider, euen with ỹ stopping place, & som on ỹ same hãd, not euen with ỹ stopping place, but lower down toward ỹ middle Cariere, distant from ỹ stopping place the length of a maneging course. Of al which three stãdings, that right before ỹ stopping place, in my iudgment is worst, for two causes. First, for that rome perhaps may be vnmeet to receiue any number of men: secondly, it is perilous. For if ỹ horse be headstrong, & chuld chance to breake the kirble, the reanes, or port mouthes of his bridle, he might run headlong vpon ỹ lookers on. And therefore I would not with a Prince or nobleman to take diew of a horse in that place, vnlesse it were from a house, out of a window, or from some scaffold: but rather to stand on the one side toward ỹ middle Cariere, and distant from the stopping place the length of a maneging course, so shal he stand without dãger and sée the beginning, the middle, and ending: and it should be so much the better, if he stand on the right hand of the rider: for so ỹ rider at both ends of the maneging path, in maneging his horse shal turn his face alwaies toward the Prince, and not his backe. The place of standing then being thus appointed, and the Prince there readie to behold what your horse can do:

Ride first faire and softly toward the Prince, to do your reuerence: that done, depart with a good round trot toward the furthest end of ỹ Cariere path, bearing your rod with the point vpward towards your right shoulder, according as I haue taught you

you héere afore, and being come to the end, let the point of your rod fal to ward the left shoulder of your horse, and make him to turne an halfe turne on the right hand, and then to stay a little while: that done pase him forward, first three or foure steps faire and softly: and immediatly after, put spurres vnto him, giuing him a liuely, swift, and lusty Cariere, and passe before the prince to the place of stop: whereas after that he hath stopped euen vpon his buttocks, then at ẏ first, second or third bound of his aduancing, according to that kind of manege that you wil vse, or that the horse can do most readilie and can best indure: you shal turn him on the right hand, and so go back again in the selfe same path the length of a maneging course, and there stop him & turne him on the left hand, & so obseruing alwaies one time and measure, manege him to and fro, as oft together as you shal thinke méete, but let the last stop be at the end where the prince standeth, who shalbe then hard by you on the left hand. Or if you wil, when you passe the Cariere, you may stop him somewhat short of ẏ prince, and after that hee hath aduanced, put him forward ẏ length of a maneging course, & there according to ẏ manege that you wold haue him to make, turn him on the right hand, and so come back againe in the selfe same path, vnto the place where you did stop him before at the end of his cariere, and there stop him, & turne him on the left hand, and so giue him to and fro, foure maneging courses: and if the horse be very strong, you may giue him fiue. And by this meanes the first and last turne shal bee on the right hand, and the last stop also before the prince.

You may also stoppe your horse when you first run him euen right against the Prince, or else two or three yardes beyond him & so without putting him any further forward, in his aduancing to turne him on the right hand, and then to follow on with that kind of manege that he can most readily make, not passing the number of two or foure courses at most, stopping sodenly vpon the last turn, which must be on ẏ right hand where he stopt first, so shal the prince be on your left hand. And after that you haue stopt your horse, in which soeuer of these places it be, make him double on each hand once or twice together, & immediatly after, or else before, entertaine him with the Capriole, and Coruetti:

but

but he should do the Capriole with a liuely courage, if he were put vnto it, before he passe the Cariere and manege: being both done, you may make him to double againe before. But maneging and doubling after a Cariere, belongeth to a horse of great force: which indeede should represent in al his doings the verie order of fight obserued in the field, which is but litle vsed now a daies, because of the general weaknes of our horses. Therefore I wil teach you another order of riding your horse to the shewe, in such sort, as he shal seem to haue more strength then he hath in deed: which is done onely by obseruing cleane contrarie order to the first. For whereas you did first make him to passe a cariere, now you shal first manege him, not giuing aboue fiue or eight courses, if you wil haue them to be swift, or of like time, vnlesse ỹ horse be the stronger, for then you may giue him ten or twelue courses, and vsing any of these forelayd nũbers, you shal be alwaies driuen to make ỹ last stop where you first began. And hauing aduanced giue him either fiue double tornes, that is, on ỹ right hand two, on ỹ left hand two, and on the right hand two, or if you wil, but three turnes in al, whereof the first and last must be on the right hand. And if he can do the Capriole wel, you may cause him to do it immediatly vpon the same: neuertheless, it were more ease for him to do it before he double. That done, go to ỹ end of ỹ Cariere path, and giue him a liuely Cariere, stopping him a litle before you come at the Prince, who shal stand then on your right hand, and after that he hath aduanced, let him double as before. For it is alwaies more ease for a horse to double in ỹ end of a manege or cariere, than at any other time. You may also after he hath runne, stopt, and aduanced, let him breath a while in the same place, and then giue him what kinde of manege you shal thinke good: wherein good discretion must bee vsed, to consider the qualitie, strength and condition of the horse, to the intent that order, time, and measure, may be kept accordinglie.

The ende of the second Booke.

## Of the corrections of vices in generall. Chap.1.

MInding to treat heere of the corrections of such vices, as horses haue either by nature or ill custome: I thinke it most meet to begin first with those vices, that be incident to the chiefest parts and members of the horse: that is to say, ỹ mouth, head and necke; vpon the ordering or disordering wherof chiefly dependeth the making & marring of the horse. But forsomuch as the most part of ỹ vices of the mouth are corrected by ỹ qualitie of the bit: I purpose therfore to reserue them vntill I come to talke of the diuersities of bits.

## Of the vices of the head and necke, and first how to correct your horse when hee beareth his head or necke awrie. Chap.2.

I Will shew you diuerse wayes, wishing you when nede requireth to proue them all, and then to vse that as your ordinary remedy, which you shall knowe by experience to doe your Horse most good. First, vse to correct him with the contrarie spurre: as for example. If hee beare alwry on the left hand, strike him once or twise with the right spurre, turning inward your bridle hand somewhat towardes the right side: and if hee beare alwrie on the right hand, then vse the contrary order. But if he be very stiffe necked on the right side, and soft, plying or bowing on the left, then vse to hold the right reane shorter thã the left, in such order as is taught you before in the chapter of ỹ bridle and reanes in the first booke. You may correct him also by giuing him suddenly a chocke with the bridle in his mouth, vpõ his nether gums on the contrary side, and you may giue him such a chock two maner of waies: ỹ is to say, either by chopping down your bridle hand on that side that hee erreth, giuing him the chocke on the contrarie side, and so pull vp your hand againe immediatly into his due place: or else by turning your hand onely inward, and straining the bit hard to his neither gummes

on the contrarie side without any chopping downe of your hād at all: which kind of correction, if it be giuen with a temperate and staid hād, it is maruellous good to correct the foresaid vice in any horse, of what sortsoeuer he be. It is very good also, and specially when he hāgeth or boweth with his whole body, more of one side than of another, to hold the calfe of your leg alwaies close to his belly on the contrary side, nighe vnto the foregirt, to the intent you may be ready from time to time, not onely to pricke him a little with the spur of the same leg, but also when nēd requireth to touch him therewith wel and surely. Whereof when you perceiue that he beginneth to haue same feare, and therby to amend his fault, you shal do wel suddenly to remoue your leg from that place, & in that instant to make much of him. So that afterward if he doth but feele the calfe of your leg comming towardes his belly, he wil immediatly amend his fault, and beare his head on what side you wil haue him. You may also correct ỹ stiffenes of his necke, by beating him with your stirrop vpon ỹ shoulder, or with your foot vnder the foreshoulder, vpon the same side that his necke is so stiffe, which wil make him to loke that way, to see what is that so grieueth him: which whiles he doth, let slacke the contrary reane, & suddenly pull away your foot and make much of him: & vsing him so a while, you shal make him both to know his fault and also to amend ỹ same. It is good also to correct him with the rod, by striking him therewith on the contrary side, either in the flanke, or else more forward nigh vnto the fore girt. But the correction of the contrary spurre is of a more efficacie, and much more commendable: notwithstanding, for a nēd, you may vse both. And in any wise forget not, whensoeuer he hāgeth more of one side than of another, to holde alwaies the contrarie reane shorter than the other, but otherwise let the reanes be alwaies euen.

And to the intent you may beare them alwaies euen from the beginning: ride a young horse at the first with falle reanes, which you may for the correction of your horse make either short or long of any side at your pleasure, and yet hold your ordinary reans alwaies euen together, and of one length, as I told you before in the chapter of the bridle and reanes. And note, that it is

exceeding good to vse these corrections, whilest you make your horse to tread ỹ rings, so often about on both hands as you shall think most requisit for his strēgth. And if he be very hard of neck on ỹ right side, it shal not be amisse, whilest he treadeth the right ring, to lay your right hand vpon the midst of the right reane, & by straining it harder than ỹ other, to make him to hold his neck that way whether he wil or not. And if he be harder on ỹ left side then to do the like with your left hand, whilest he treadeth ỹ left ring, making your right hand for that time the bridle hand: notwithstanding, it were more sightly to shorten ỹ left reane, without shifting your hand, in such order, as I haue tolde you before in the first booke. And to the intent you may force him the more, to come wholly on that side that you would haue him, it were not amisse, in some place where none may see you, to counterpaise him by bending downe your body and head on the selfe same side that the horse is stifnecked, staying your legs so as ỹe fal not, beholding alwaies his eye on that side: where with also he will looke you in the face, and thereby shal be forced to correct his owne fault, in turning his necke that way that you would haue him: which kind of counterpaising, you may vse sometime in riding him in & out at the length of a mile: yea, also sometime when he treadeth the rings, not forgetting to turn your bridle hand also accordingly. But if you would haue him to bee iust of bodie, head, and necke, quickly then vse to trot or pase him to and fro, ỹ length of fiue yardes, or therabout, making him at euerie end to stop and to turne, helping him with your tongue, spur, or calf of your leg, on the contrary side, and sometime with the closing stroke, bearing alwaies a steddy hand, which would bee moderately turned towardes the same side. And if you see that he doth not bring ouer the contrarie legge orderly, bearing his head & necke euen and iust, then neuer leaue correcting of him with the contrarie spurre all the way, vntill he come at the other end, and there make him to turne againe on the same hand that hee turned on before, continuing still to trauell him on the same side, vntill he hath amended his fault: which if he doth, then you may turne him on both handes interchangeably, so as your first and last turne be on the right hand. And trauell him in such

fort to and fro, to the number of thirtie courses, or so long as you shall see him able well to endure, to the intent you may leaue him with a good mouth, remembring alwaie to make much of him when he doth wel, and not to helpe him with the spurre, but when néed shal require, but onely with your tongue, which must be alwaies one.

How to correct your horse when hee beareth not right the lower part of his head, called of the *Italians*, *Mustacchio*, and may be called of vs the Mosel, which comprehendeth both nose and mouth. Chap. 3.

IF your horse then vse to carry his mosell awrie: put three little short nailes on the inside of his portlmouth, on the contrary side, and ride him with a musroll, having also three like nayles: yea, and if hee carrie his whole head awrie out of all measure, then put three like nayles also on his headstall on the contrary cheeke: for otherwise the first two corrections shall suffice. But if such vice hath been long rooted in him, then al three corrections shal be little inough. And if the headstal and mosel be made of double leather, you may so fasten the nailes betwixt the two leathers, as the prickes shal be next vnto the horses cheek, & the heads of them couered with the vpper leather. Or if you wil, you may put them in a thin plate of iron, made no broder than ŷ leather, which plate being fastned to the inside of the leather, shal be the greater correction vnto him. But let him not wear those nailes aboue ten daies: for though you take them away, yet the place will be so sore where they stood, as the horse wil be afraid to beare his head any more awrie, thinking that the nailes bee there still to pricke him. And note, that such nailes wil correct some horse, if they be put on the selfe same side that he wrieth his head, so well as though they were put on the contrary side. It is good also to put such nailes on ŷ backside of the link, sustaining the kirble hooke in such order as I told you before, in ŷ 14. chapter of the second book. But to some horse, which perhaps through the negligence of ŷ rider hath accustomed to cary his nose, yea, and also his necke cleane awrie, so as the muscle of his neck séemeth to be naturally bent & crooked: it is requisite not only to vse the

the remedy aboue sayd, but also to tie ỹ one end of a thong vnto the middle eye of his bit, or to the ring of his musroll on that side wheron he is so stiffe, and the other end vnto his surcingle, in such sort as I shewed you in the second booke, in the first correction of the Credenza: and so to let him stand a long while together.

And you may also if you wil, ride him for certaine dayes tied in that sort, but then ỹ thong would be strained somewhat straiter. Or in stead of the thong, you may put on his headstrain, and tie the reanes of that vnto the surcingle on his stiffe side, which shal be of more force. And vntil he cary his head iust, let but one vse to ride him, and such a one as hath some skill, for all Riders hands are not alike: and therefore often varying of hands, may make his fault incureable. Wherfore al ỹ waies aboue taught, are inuented to helpe him that lacketh knowledge, or hath not a staid hand. For assure your self, that whosoeuer hath a good iudgment, a temperate hand, and can obserue such rules & preceptes of riding as are before taught, he shal neuer nede any of these inuentions, to correct either this vice, or any other.

## Certaine causes why it is better for a horse to beare his head vnder then right out, or to cast it aloft, and then how to correct him, if hee wil not bring in his head and reane as he ought to doo. Chap. 4.

Although some do thinke it good, that the horse should haue his head alwayes at libertie, and not to bee restrained of his naturall fiersenes: yet I in no wise can allow it. For first you shall vnderstand, that his forehead is the strongest part of his head, and his nose or mosel is the weakest part, and tenderest, the more he thrusteth out his mosel, ỹ more he distendeth his back, and hath ỹ lesse force therein: and therefore can neuer make good manege, obserue time, kéep order, nor continue in breach any while together; whereas by bringing in his mosell and the thrusting out his forehead, he aduanceth himself, and gathereth strength in his backe, vniting his force together: and thereby also shewech lightnesse & nimblenesse in all his doings. Secondly, he shall see his way the better, and be in lesse danger

of falling when he runneth: and though he should fal, yet he shal be more able to recouer himselfe againe, than when hee holdeth his mosell right out. Thirdly, in running against his enemie, he shal be able to do or sucker more with his forehead, than with his mosell being the tenderest part of him. Fourthly, he shal not be so apt to reare right vp vpon euery light occasion, as otherwise he might doe. Finally, the horse that reareth wel, and bringeth in his mosell, shal alwayes be a great deale better stayed, both of head and necke, and haue a better mouth, thã he that beareth his mosell right out. Wherefore if your horse wil not bring in his head at any time that you stay him with ỹ bridle hand, then holding your hand still at that stay, correct him sometime with your right spur, and sometime with your left, and sometime with both spurres together. And in the self same instant, it shal be good also, sometime by thrusting him with your right hand vpon the necke, to force him to bring in his head: but if he wil not yeld for all that, then by pulling the bridle towards you, make him to goe backe about three paces, and then to returne faire and softely to his first place, continuing so to do a good many times together: and euery time that he thrusteth out his nose, correct him in maner aboue saide, neuer leauing him vntil you haue made him to amend his fault. And if he be very hard to be brought thereunto, it shal be good to strike him sometime with your stirrop vpon ỹ shoulder, or with your foot vnder ỹ shoulder, holding it still there to make him looke that way. But if ye see that the pricke of the spurre doth cause him to bring in his head, then make much of him, without molesting him any more: and by thus vsing him, you shall make him to reare as you would haue him, either going, or standing still.

## How to correct your Horse when hee ducketh down his head, and beareth too lowe. Chap. 5.

IF hee ducketh downe his head, whilest you stand still in anie place, then stay your bridle hand, and suddenly correct him with one spurre alone, or with both together, not suffring him to remoone from that place: and also if hee vseth that toy going, then correct him in like maner, without making

king him to alter his pase any whit at all: not failing at euerie time that hee so doth, to vse like correction. And if in ducking down his head, he beareth it more of one side thã of another, correct him on the contrary side, and not on that side whereon hee haggeth. And if hee be very hote and furious, then immediatly after such correction, lay your hand vpon his necke, or withers, in token of cherishing him, and that shal keep him from running away: and so by suffering, he shal learne to know his fault, and to amend the same. But if your horse vse to ducke downe his head when you stoppe him: then beside bearing a temperate and stayed hand, you must giue him the chocke of the bridle with the right reane: and in that instant correct him sometime with one spurre, and sometime with the other. That done, returne from whence you came: and from thence trot him, or gallop him to ỹ selfe same place where you stopt before: and there stoppe him again, holding the right reane in the midst with your right hand, being alwaies ready therewith to giue him the chocke vpon the right side of his mouth, and by mouing the bit faire and softly in his mouth, sometime with the same reane: make him to knowe that you hold the reane in that hand of purpose. Whereof the horse will be so much afrayde, as hee will no more cast downe his head: and vntil he leaueth this fault, neuer faile in this sort to correct him: and likewise when he doth well, forget not to cherish him. And though a false reane for this purpose wold do wel, and specially for a colt, yet it is not so good a correction as to vse the ordinary reane: but if to giue him the chocke with the right reane wil not suffice to correct his vice, then giue him the chock vpon both sides of his mouth with your left hand, holding both reanes together: and by vsing sometime the one correction, and sometime the other, you shal make him to leaue that vice well inough.

## How to correct that horse which doth ouerreach in his going, that is to say, doth smite his forefeete with his hinder feete. Chap. 6.

This fault is most commonly incident to a yong horse: and therefore, besides making his shoes shorter behind than a-

therwise, they ought to be, you must also fauour him whilest he treadeth the ringes, not increasing the number of his turns, nor quickening his pase, but according as his strength, and breath shall require, which by often riding him a little at once, wil increase every day more and more. And then if he ouerreach whilst he treadeth the rings, correct him with the spur on the contrary side, to the turne which he maketh: but if he ouerreach in going right out, then correct him on that side of his belly whereon you see his neck to be most stiffe. And sometime you may also correct him with your rod vpon ẏ one or other shoulder. It is good also to make him to trot or to gallop in some stony ground or else for want of such ground, to strow the ring pathes ful of stones, of all sorts, that is to say, both with great, meane, and small, and that wil make him to lift his féete, in such sort as he shal seldome ouerreach. Notwithstanding, if his hooues bee not verie sound and good, I would not wish you to vse this way, for feare of riuing his hooues, which of your horseleaches is called a false quarter, and of ẏ Italians, Falso quarto. But rather make him to leaue this fault by well féeding him, & by riding him moderatly without taking ouermuch of him at once, to the intent hee may increase in strength and breath: which once had, then the griefe of his ouerreaching, wil bee a good correction vnto him of it selfe. Moreouer, if you caused the ring path to bee digged full of staires or degrees, it would keepe him from ouerreaching. And sometime it were not amisse to make him go aswash ouer thwart the furrowes in some ground newely plowed with deepe furrowes. Thus hauing shewed you diuers waies of correcting this fault, I wish you now to vse your owne discretion in choosing that which shal be most meete for your horse, whose qualities you ought best to know.

## How to correct that horse, which when he is chastised for any fault with the spur, vseth to shake his head or eares. Also how to knowe by the moving of his eares, when hee is maliciously disposed, and how to correct him for the same. Chap. 7.

Euery time that he so shaketh his head, or eares, when hee is corrected, double the strokes on the selfe same side, that you did

did correct him on before, neuer leauing him vntill you haue made him to hold his head still, and patiently to suffer such correction as you giue him. And in no wise let any fault escape vnpunished, but alwaies correct him immediatly for ỹ same, sometime with ỹ one spurre, and sometime with both together, and sometime with one after another: the order of all which strokes is taught before in the first booke, in the eleuenth and thirtéenth chapters. If your horse in his going lifteth vp one eare, and holdeth downe the other, and fareth as though there were a flie in that eare: then I aduise you take héede to your selfe. For most commonly when he doth so, he mindeth to play you som shrewd toie, as to plunge aloft, to run ouerthwart, or to fall down, or to do some like desperate act. Wherefore sodenly interrupt him of his purpose, by giuing him two or thrée strokes with ỹ contrarie spur, on the contrary side to that eare, which he most moueth. And serue him so, as often as he shal vse that toy: and if it be abroad in the plaine field, it should not be amisse in the selfe same instant that you spurre him, to chastise him also with a terrible voice: and by giuing him a chocke with the bridle on the one side of his mouth. Yea, and besides all this, if he be very froward and curst, let not to correct him also with a good stick, by beating him therewith wel & sarely vpon the head betwixt ỹ eares. Which correction, though he be neuer so proud and stubborne: yet being giuen but once in time, and as it should be, it wil so chastise him, as he shal be glad euer after to leaue such fantasticall toies, so long as you are on his backe. And so doing, forget not to make much of him, leauing him alwaies with a good mouth. But note that some time a flye entring indeed into your horses eare, or the pricking of his headstall, may cause him to shake his eare, or to hold it otherwise than he ought to do, meaning no shrewdnes at all: and then it shall suffice to correct him moderately with the contrary spur, onely to make him that he think no more vpon the flie, which perhaps stingeth him, or any other thing that grieueth him, but to forget it, and so to attend his way.

How

How to correct your horse when hee whineth, intending to strike with his heeles, or to do some shrewdnesse, being in the company of other horses. Chap. 8.

ALso if your horse, when you are in the company of other Horsemen chance to whine: or if you perceiue that hee meaneth to doe some shrewdnesse, as to bite or strike, correct him immediately with the single stroke of the contrarie spurre, doubling the same according as occasion shall require, aswell in his going right out, as in his standing still. Albeit, if he shew any signe of shrewdnes towards his fellows in marching forwarde, it were not amisse to correct him with the clinching stroke, and somtime by giuing him the check of the bridle, on the one side, or both sides of his mouth and if that wil not suffice, thē you may all to rate him with a terrible voice, and correct him with your rod on the one or other flanke: yea, and perchance it shall be néedful also to giue him therewith a stripe or two vpon the head betwixt the eares.

Of restifnesse, of the kindes and causes therof. Chap. 9.

IF a Horse bee restife, it procéedeth for the most part through the fault of the rider, and of one of these two causes: for either the horse is too vile, or else too stout of courage. If he be vile, then being ouer wearied, he wil for faintnes giue ouer, and go no further: but if he be proud & stout, thē féeling himself somwhat weary, & out of breath, he wil fal a leaping & parking, thinking to bee eased of his trauel that way: or perhaps wil do ẏ like in ẏ beginning, immediatly after his rider be mouted: & if he perceiue that his rider be afraid of him, then he wil take such a stomacke vnto him, as hee wil suddenly stay and stop there, maugre his riders head. Of which two kinds of restifnes, ẏ which procéedeth of vilenesse of courage is the worst. But there be some horses, not onely stoute, and lusty of courage, but also ramege, that is to say, hauing two minds betwixt going & not going, when they list: which kinde of horses, if they chance to become restife, they bee worse than any of the rest.

Remedies

## Remedies against restifeneſſe proceeding of vile courage. Chap. 10.

IF your horſes reſtifnes proceedeth of vile courage the ride him into ſome long way or lane, cloſed in on both ſides with a wal, dike, quickſet, or hie hedge: but at the one end thereof cauſe certaine men to ſtande behinde your horſe, with ſtaues & ſtones in their hands: & if he wil not go forward, then let them ſuddenly ſtrike him with their ſtaues vpon his hams and legs behind, and likewiſe hurle their ſtones at the ſame places, al to rating him in that ſame inſtant with a terrible voice. During which time, you your ſelf muſt ſit ſtil, keeping ſilence: and let them not ceaſe beating and crying out vnto him, vntil they haue made him to go orderly forwards as hee ſhould do: which when he doth, then immediatly let them ſtay both hād and voice, and make you much of him, by clawing him on the neck. That done, make him to goe from ỹ one end of the lane to the other to and fro, about eight times, & then light off his back or elſe paſe him faire and ſoftly to the ſtable: and for certaine dayes, ſee that you vſe none other order than this, vntil hee bee cleane rid from that vice: wherein ſo often as he doth offend, returne you to the foreſaid correction: for this is a proued & an infallible way to bring any horſe from his reſtifenes. Which correction you might vſe alſo in the plain field, in ſome new plowed ground, but for wearying of the footmen, whoſe trauel ſhould be greater there to follow the horſe euery way that hee flieth out, than in a lane. And the more that your horſe goeth backewarde whileſt he is ſo corrected, let the footmen lay on the faſter, & crie out the lowder: and beſides that, ſometime it ſhal not bee amiſſe to turn his head toward that way that he would ſo fain flie out. And ſo in your anger force him, by beating him all ỹ way vpon the head wᵗ a cudgel, & by crying out vnto him, to gallop ſo hard as hecan driue, ỹ length of a good Cariere: and then turne him againe toward the way from whence you began to gallop him, & make him to go forward, correcting him at that time, more with your voice, than with your cudgel. And if he goeth quietly, then leaue crying out and make much of him, for ſure he wil be glad at length to yéld, rather than to be ſo beaten: but if he continue

ſtill

still in his frowardnesse, and will not go forward, then you may giue him halfe a turne, and immediatly by pulling in the bridle, make him to go backward about tenne paces in so hasty wise as you can. That done, turne his head again towards that way in the which he would not goe forward, and then suddenly put him forward, which doeing for the most part will make him to take his way. And to the intent hée may be the sooner and the more thoroughly corrected of this vice, you may besides all this, tie a good long cord vnto his taile, winding it about, like as you doo when you trim your horses taile with a ribbon or lace, the last knot whereof would be fastened together with som of ỹ haires, for feare of slipping: which knot if you cannot make, then tie the vpper ende of the corde vnto the hinder buckle of the saddle, serving the croper, and so shall it not slip away. The neather end of which corde must hang downe, and traile after the horse vpon ỹ ground And whē your horse wil not go forward, but goeth backward, let one of the footmen pull the cord hard vnto him: which when the horse feeleth, the feare to be pulled & haled wil make him to spring forward. And so doing, the footeman must in the self same instant let go the cord, & (to be sure) besides the pulling of the cord, let the rest of the footemen also all to rate the Horse with their voyces, laying on with their staues, and hurling their stones. And by vsing him thus a while, you shal correct him of this vice wel inough.

## Remedies against restifnesse, proceeding of stubbornesse and stout courage. Chap. 11.

But if you perceiue that such restifnesse proceedeth of too much courage and stubbornnesse which the horse hath gotten through the fearefulnesse of his rider: then ride him in some plaine fielde newly plowed, and there if hee (whilest you giue him his lesson) chance to stop indeed, or minde to stop and so to become restife: then immediatly all to rate him with a terrible voice, beating him vpon the head betwixt the eares, and vpon the forelegs with a good sticke. And the more resistance that he maketh, in leaping or going ouerthwart, or seeking to fal downe flat, or to lie downe on the one side, or to doo any other

shrewd-

shrewdnesse, increase you his correction so much ỹ more, aswell in rating him as beating him. And to molest him ỹ more, giue him the ring turnes on the one side, or on ỹ other, or on that side whereon he himselfe doth most leane: by meanes whereof you shall so tame him, as he seeing his resistance not to preuaile, shal be content from thenceforth to go quickly and orderly. And in so doing, forget not to make much of him, both with your voice and also by clawing him with your hand vpon the necke. That done, trot him euen there too and fro, about tenne times: then gallop him, and last of all, pase him, failing not to correct him in like sort, so often as he shal offend in the like vice. But note by the way, that when the horse once knoweth the correction of the sticke or cudgel: it shall suffise to correct him with a terrible voice, and spectally if he be ramege, and of two mindes, against which fault there is no correction of more efficacie. For ỹ voice correcteth without disorder: and it maketh the horse afraid without putting him in despaire, whereas the cudgell many times maketh him desperate and faint hearted, vnlesse he be corrected therewith in time. After which correction he must also be cherished, and much made of, to the intent hee may vnderstand that his vice was cause of his correction. For the rod vsed in this sort hath no small vertue. And note, that though the corrections taught aswell in the last chapter as in this, may indifferently serue to correct this vice, proceeding of any of the two causes aforesaid, yet they be more kindly vsed, when each vice is corrected with his proper correction, according to the order aboue declared.

It is possible also, that you may correct this vice, by holding a sharpe naile in your hand, to pricke him continually behinde on the rumpe, neuer remouing the naile from thence, for any resistance or striuing that he maketh, vntil he hath left his stubbornesse, and is content to go quietly. Which done, take away your hand, and clawe him with the same immediatly vpon ỹ necke: that done, you may pase, trot, gallop, or manege him as you shall thinke good.

Other

Other corrections to be vsed against restifnesse, when the rider lacketh Arte, and knoweth not by order of riding, how to get the maisterie of his horse, and to make him know his fault.

Chap. 12.

LEt a fotman stand behinde you with a shrewd cat tied at the end of a long poll with her belly vpwarde so as she may haue her mouth and clawes at libertie: and when your horse doth stay or go backewarde, let him thrust the cat betwixt his thighes, so as shee may scratch and bite him, sometime by the thighes, sometime by the rumpe, and oftentimes by the stones. But let the fotman and all the standers by threaten the horse with a terrible noise, and you shall see it will make him to go as you would haue him: and in so doing be ready to make much of him. Also the shrill crie of a Hedgehog being strait tied by the fot vnder the horses taile, is a remedy of like force: which was proued by master Vincentio Respino, a Napolitan, who corrected by this means an old restife horse of the kings in such sort as he had much adoe afterward to keepe him from ỹ contrarie vice of running away.

The like recreation also may be giuen with a whelpe, or some other lowd crying & biting beast, being tied to the croper, so as hee may hang downe vnder the horses taile, hauing a long cord fastened vnto him: which corde, passing betwéene the Horses thighes, the rider shall hold in his right hand to molest the horse therewith, by pulling it, and letting it go as he shal see it needful. Or in stead of such a beast, there may be tied a péece of iron of a foote in length, or more, and three fingers broad, made full of prickes like thornes, with a corde fastened thereunto, as before. But note, that all these waies rehearsed, are not to be cõmonly vsed, but onely in time of néede, and that with great discretion: for otherwise you should but amaze your horse, and driue him into despaire, so as he shal neuer vnderstand your meaning. And to say the truth, they are of little importance in respect of the remedies taught before in the last chapter: and therefore I would wish you chiefly to vse them, being sufficient alone, I warrant you, to correct any maner of restifnesse. Neither do I allow the waies that men were wont to vse in old time, to correct a restife

horse

horse by tying a corde with a riding knot vnto the horses stones which corde passed vnder the horses belly vnto ỹ riders right hãd holding the same, and straining it when nẽd did require: which indeed is more hurtfull than profitable, and therfore not mẽt to be vsed but in som extremity for ỹ correction of a stubborn horse accustomed to fall downe in the water: of which vice wee shal treat heereafter at large.

## Of the contrary vice vnto restifeneſſe, which is to run away: of the cause thereof, and how to correct the same. Chap. xiii.

The vice of running away, doth not onely proceede of the hardneſſe and euilnes of the horses mouth, but also many times through the fault of the rider, not hauing knowledge, nor stomache, as I saide before, to tame a horse that is of too lively courage, and therewith perhappes hard of mouth, whereby the horse getteth an euil custom, either not to stoppe, at what time as the rider would haue him, or else if he stop, to stop without order: for redreſſe of which vice, you may vse these remedies here following.

If you chance then vpon an old horse accustomed to run away when he should stop, you must begin to ride him with more respect than you would doe a colte: and first ride him into some long way or lane inclosed of both sides, and there teach him to stoppe, first vpon a soft pase, then vpon a trot, and afterwarde vpon a galloppe: and whensoeuer he stoppeth, make him to aduance withal, by helping him in such sort as is before declared in the first booke. But because of his euil custome, see that ye runne him not of a long season: and to be sure that hee shal not fall, or runne away at ỹ stop of himselfe when you gallop him, appoint a footman to stand before him at the place of stopping, wᵗ a sticke or cudgell in his hand, wherwith, after your horse hath stopped and aduanced, let the footman by striking him softly vpon the forelegges, but seldome vpon the snowt, make him to go three or foure steps backward. Whereunto if he be vsed a while, you shal see that afterward, so soone as he hath stopt, he seeing the footman standing there, and feeling the drawing back of your bridle hand he wil go backe of his owne accord, without any beating at all.

And

And when he is once perfect as wel in his stopping, as in his going backe, then gently giue him a Cariere, forcing him in his running, neither with voice, spurre, nor sticke. And onely when you come nigh vnto the place of stopping, helpe him with your voice to stoppe: and for the more assurance, let the footeman in the selfe same instant also helpe him with his voice, & threaten him with his cudgell. Yea if he perceiue that the horse wil néeds passe forward, let him giue him a good blow with his cudgel vpon the snowte: which blowe, I beléeue shal not néede, if you obserue wel the order before taught. For the helpe of your voyce, the pulling in of the bridle, and the sight of the footeman, shal suffice to make him to stop as he should do: and in so doing, sée that you make much of him, suffering him to pause a while. That don, make him to go backward, euē as you did before, when you did pase, trot, or gallop him. And after that, pase him to and fro in ẏ Cariere path, about sir times, staying alwaies at ẏ accustomed stopping place, and so depart: & sée that you run him no more of a good while after, but onely vse ẏ order aboue declared, vpon a soft pase, trot, or gallop, not forgetting alwaies to haue a footmā at the place of stop, which footman beside his cudgell, may also haue stones in his hand, to hurle at the horses snowt, when néed requireth, which I doe seldom, or rather neuer allow, vnlesse he hath ẏ steadier hand: or if you wil, you may cause two footemen to stand before him each of them hauing a good long staffe in his hand: at the vpper end whereof, would be tied a little bundle of strawe, which being kindled, let the footman, when the horse wil not stop, thrust them into his nose, the feare of the flame whereof flashing before his eies, and the fire parching his skin, together with the smoke entring into his nose wil make him to stop. But though this correction for a néed is very good: yet I would wish you to vse ẏ order before declared, which is sufficient I warrant you, to make him stop with the bridle onely, without the help of any such extreame remedy.

It hath béene séene many times, that some rider hath corrected his Horse of this fault, by running him in the plaine field out of breath, continually beating him & spurring him in his anger, so as the horse hath bēn glad to stoppe of himselfe: which correctiō hath

hath taken so good effect, as the rider giuing him a iust Cariere, the next day following, hath made him to stoppe with the least pulling in of ỹ bridle that might be. But this correction is very perillous, and inough to kill a horse, and therfore is not méete to be vsed, but onely when he being too stubborne doth ouermuch force you, and will néeds run away with you, whether you will or not.

Besides the first order aboue rehearsed, for his better correctiõ you may also bit him according to ỹ quality of his mouth, whereof we shal treat hereafter: and vnto that bit, or to any other, you may fasten a cord, which must passe betwéen his gums and neather lip in such sort as I shewed you before, in the second book, in the third correction of the Credence. Of which cord, when his mouth is once throughly corrected, he shal haue no néed, nor yet of any other helpe but of the bridle only: but in any wise let him continue in his ring turnes: which being ended, vse him to stop and to aduance vpon the knoll of som hill downward. And note this by the way as a general rule, that the correction of the footman with a sticke or cudgel, is neuer to bée vsed but when some great necessitie requireth it. For it may make the horse too fearful, vnlesse the footman haue the more skill, and can obserue in his correction both time and measure.

## How to correct that horse that wil reare right vp, when hee is corrected for any fault with a sticke vpon the head. Chap. xiiii.

AS often as he vseth this vice, faile not you in the self same instant that he riseth and hangeth aloft, to beat him wel and surely with a good long stick vpon the forlegs, somwhat beneath the knées: yea, and if he be very much accustomed to this vice, it shal not be be amisse somwhat before he riseth, to giue him one blow vpon the legs at the least. And for ỹ more suertie, & to make him the more afraide, it shal be néedful to beare the rod with the point downward, right before his knées, alwaies in his sight: & being corrected a while after this sort, you shal sée that hee shall leaue that fault wel enough.

How to correct that Horse that wil fal downe to the ground when he is a little weary, or prouoked to do any thing, which he would not willingly do. Chap. xv.

CAuse some expert footman hauing a good cudgell in his hand, to be somewhat nigh you, at such time as you ride your horse, to the intent that when hee perceiueth the horse maketh any offer to lye downe, hee may bee ready with his cudgell or staffe to threaten him, & to fraie him with a terrible voice, gesture, countenance, and by cruelly looking him alwaies in the face, more or lesse, according as time and occasion shal require: which wil be such a terror vnto the horse, as whilest he loketh all amazed on the footman, he wil haue no mind to lie downe but stand still, attending to his rider: who in the meane while must sit stil in his saddle, without making any noise or moning at all. Afterward, make him to trot the ring turnes, whereas you may cause also more men to stand with staues in their hands, and to do as the footman did before. And if he wil needes fall down there, then let them hold him vp whether he wil or not, cruelly correcting him, both with their voices, & also with their staues, by beating him vpon the head betwixt the eares, or vpon any part of his body next to hand. And if this doo not correct his vice, truely the fault is in the footman, lacking perhaps such terrible voices, cruel looks and gestures, or such order and time of correcting, as shuld serue the purpose. And therfore it were good for such men to haue in their hãds fierie staues, made in such sort as is before declared in the last chapter saue one, ỹ feare & smart whereof wil kẽp him from lying downe whether he wil or not, which correction may be vsed for a restiffe horse, by sterring him behinde betwixt the thighes.

This vice also may be corrected by the help of a footman, hauing in his hand a squirt full of water, which he must squirt in ỹ horses eies, when he offereth to lie down, which is a good remedy also against the Credence. But these remedies last mentioned, are to be vsed of riders of small skil: for an expert rider will correct any vice by true Art, without ỹ helpe of any such toyes.

How

## How to correct that horse which passing through any water wil lie downe in the same, and what is the cause of such vice. Chap. xvi.

This vice vndoubtedly proceedeth of a natural disposition, incident to that horse which is foled vnder the signe of Leo, which is a hot and a fierie signe. Albeit all horses foled vnder this signe haue not this fault indeede: neither can it be knowne by the Ostrich feather in the horses necke, nor yet certainely discerned at the changing of his téeth, whatsoeuer other men say: but onely by his plaine lying downe in the water, for the which fault there is no better remedie, than this here following.

Cause a seruant to ride him into some riuer or water, not ouer déepe, and appoint three other seruemen with cudgels in their hands, to follow him hard at the héeles into the water, to the intent that when the horse beginneth to lie down, they may be readie to leape vpon him, and with the helpe of the rider to force him to ducke his head downe vnder the water, so as the water may enter into his eares: not suffering him to lift vp his head againe of a good while together, but make him by maine force to kéepe it still vnder, continually beating him all the while with their cudgels, and rating him with lowde and terrible voices: that done, let him onely lift vp his head to take breath and aire. During which time, cease not also to beate him still vpon the head, betwixt ẏ eares: which done, duck his head with like violence once againe into the water, and then let him rise vp vpon his féet: and whilest he is passing through the water, let the men follow after, beating him, and rating him all the way, vntill hée be cleane out of the water, and then leaue, for otherwise it were disorder. Then the next day following let him be ridden againe in the same water: and so soone as his rider séeth that the horse maketh any offer to lie downe: yea, and sometime before he perceiueth it, let him immediatly preuent him of his purpose, by touching him with his spurs, and by beating him vpon the head betwixt the ears, and vpon the flanke with his stick, threatning him with a terrible voice, and you shal sée, it wil make him to forget his lying downe, and to passe through quietly:

yes, and it is possible that this correction alone, without ỹ helpe of the other before declared, wil suffice to bring him from this vice. And to both these corrections, you may also, if you wil, adde the help of ỹ cord tied with a riding knot, about the horses cods. which cord the rider may straine or let go, according as he shall see occasion, as wel to prevent the horse of his lying down, as also when his head is kept vnder the water: the griefe whereof, together with the other corrections, wil ỹ sooner cause him to leaue this vice.

How to correct that horse which is skittish or fearful, and will start at euerie thing, and whereof such vice proceedeth. Chap 17.

A Horse may be fearfull, for that hee is young, and hath not beene ridden perhappes where sundry sights are: and therfore if you chance to ride him through some towne or faire hee is afraide of euery thing that hee seeth. Likewise if he hath beene skared before time with any thing that hath offended him, either with noise, sight, or otherwise, so often as he shal hear or see the same, he wil be afraide. And finally, fearefulnesse may proceed for lacke of perfect sight, which is worse then al the rest: according to all which causes, remedies do follow heer orderly. But first, as touching the yong Horse, which is afraide of such thinges as hee neuer sawe before: see that in no wise yee doe beat him for the same, least he take the thing that hee beholdeth and shunneth, to be the cause of his smart, and so become more fearful than he was before: but rather stay there a while, and by gentle meanes make him by litle and litle, to go towardes the thing whereof he is afraid, which doing make much of him: and you shal see that by standing somtime stil to looke vpon it, and somtime by going towards it, he shal be so wel acquainted therewith, as he wil not feare it: and when hee commeth at it, let him stay there a pretty while together, to the intent hee may bee the more assured thereof. But if your Horse be afraide of any thing, which hath offended him before time, so as hee will by no meanes passe by it: then see that you your selfe molest him no manner of waies, but appoint some foteman standing behinde you to prouoke him forward, with the sounde of his

lips,

lips, and by threatning him with his voice, and if néed be, by beating him with a staff vpon the rump, and vpon the hinder legs: and when he beginneth to goe forward, make you much of him al the way, for so a yong horse must be handled. But if your horse be throughly broken in all points méete for him to learne, and knoweth what all manner of corrections and helps meane: then if he chance to be afraid of any thing, and so, suddenlie stoppeth, going by the way, let not immediatly to put him forward, by helping him with your voice, legs, spurs, or rod, or all togither, without any staying, to acquaint him with the thing wherof he is afraid: and that shal make him to goe alwaies forward, as he ought to doe.

But if your horse be afraid of anie thing for lacke of perfect sight: then beate him not, but rather by making much of him, encourage him by little and little to go forward, helping him somtime with your voice. And if you sée that he standeth doubtfull, betwixt going and not going, then suddenly to put al doubts and fearefull imaginations out of his mind, help him not only with your voice, but also with your spurres, and it will make him to passe forth without any stay.

Note also, that to embolden a yong horse, so as he may abide any thing, it is very good to ride him oft in the night season, & in the day time in some town amongst Artificers: and specially amongst Smiths, Pewterers, Armourers, Brasiers, Tinkers, and such like: and likewise amongst Furriers, where diuers coloured skins hang in sight, & also abroad in the field, where dead carcasses lie new slaine, to the intent that no manner of sight or noise may seeme strange vnto him: and whensoeuer he wil not come nigh any such thing, then vse the order before declared.

It is good for certain daies to let him weare such a whurligig as children run withall against the winde, made like a windmil sailes, fastned to his headstall vpon his foretop, or on the one side of his head, vnder his eare. For besides that the swift turning about therof before his eyes, doth helpe much to assure him: the whitenes also of the same, whilest it turneth about, doth take away those impressions or shadowes from his sight, which before were wont to fraie him. But though this be a great help to em-

bolden the moſt part of Horſes: yet there be ſome horſes of ſuch a nature, as after they haue worn it, they wil be the worſe for it, and become more fearefull than they were before: which ſo ſoone as you perceiue, vſe it no more, but rather vſe the meanes and order before declared.

Note alſo that when you vſe the forſaide whurligig, you may make it of what colour you wil, as either black, red, yellowe, or bleiwe, according as you ſhall think it moſt needful, for the allu-ring of your horſe.

## How to embolden your Horſe, and to make him hardy againſt other horſes. Chap. xviii.

VSe to encounter vpon a ſoft paſe or trot, with another horſeman, face to face, in one ſelfe path, ſo as your horſes dolle not one another, leaſt your Horſe receiuing ſome harme, become more fearefull than before: yea rather, when you are almoſt one vpon another, if the other horſe bee not fearefull, nor will giue place of himſelfe, then cauſe his rider to make him to recoile back, by pulling in his head with the bri-dle: and that ſhal be a good incouraging to your horſe, and make him ye bolder alwayes to go towards any other horſe. Or if you wil, you may encounter one with another, riding in two ſundry paths, the one lying cheeke by cheeke, within a foot of the other, be-ing both of one length, each of the containing about ten paſes, to the intent that in maneging your horſes to and fro vpon a trot, you comming one towardes another from two contrary ends, may both meet right in the midſt of your courſe, and ſo paſſe one hard by another: which you ſhal be ſure to doe, if both your hor-ſes keepe like time and meaſure, as well in their trotting as in their turning: and look on what hand ſoeuer the one turneth, ye other muſt do the ſame, and in the ſelfe ſame inſtant: and like or-der muſt be obſerued afterward, when you manege them alſo vp-on a gallop. Thus by paſſing and repaſſing, oft meeting with-out iuſtling: your horſes ſhal bee ſo wel acquainted, as the one will not be afraid of the other. Hauing the company of another horſeman, you may alſo embolden your horſe whileſt you trot the rings in this order following. Firſt, enter both together

into

into the right ring: and then turning taile to taile, followe you the right hand, and let him follow the left, in the selfe same ring, enlarging the ring path so, as in your meeting, whilest you go about, you may touch one another. And when you haue gon twise about ỹ right ring, enter both together into the left ring, & there torning tails, obserue like order as before: and to shift from ring to ring, treading the same first with a good round trot, & then if you will, with a gallop. And thus by often meeting, both horses shal be wel acquainted, and the one assured of the other, whereby with time, your horse shal ware so hardy, as he shal be afraide of no horse. It is very good also to stand stil with your horse hard by the ring, looking on whilest another horse trotteth & galloppeth the rings: or to stand right at the stopping place, when another horse passeth a cariere: or on the one side, so as ỹ other horse in his running, may passe hard by your horse. And to ỹ intent that your horse for feare turne not away when the other horse commeth any thing nigh him, it shall bee good to haue the company of some other Horseman, being mounted vpon such a horse, as is bold, and will not bee afraide, standing a little off from you, whose ensample should be a good encouraging vnto your horse. And to go somtime in the company of such a horse through som citie or towne, would be also a good boldning vnto him.

## How to make your horse to abide both staffe, sworde, great noise, gunshot, or any other thing. Chap. 19.

VSe first to acquaint him throughly with the rodde, so as hee may not bee afraid thereof, by often coying him therewith vpon the necke, and by holding the point right foorth, sometime betwixt his eares, and sometime on the one or other side of his head, so as it may bee alwayes in his sight. And when hee is throughly assured of the rodde: then appoint some footman having a staffe in his hand, to stād in your way, wheras you should passe: and as you are comming towards him, let the footman by little and little, make signes as though he would lay your horse on the head with his staffe: and then encourage your

horse to go forward towards the footman, who in the same instant must retire backward, as though he would flie away: & by vsing him so a while, you shal see that he will not be afraide of the staffe at all. And after that he can abide the staffe, make him by the like meanes to abide the sword: but let the footeman beware that he strike him neither with staffe nor sword, least you vtterly discourage him for euer. After this you may cause three or foure or a great number of footemen to stand in his way, making a great howting and showting before him, threatning him with lowd voices, against whom encourage him to go forward, first with a soft pase, secondly with a trot, and thirdly with a gallop, at which time, let the footmen retire backe, faining to run away. And if such footmen had staues and swordes in their handes, to threaten him withal, it should make him so much ỹ more bolder.

To make him abide gunshot, or any other like terrible noise, let him go hard by another horse, or rather betwixt two other horses that haue been accustomed to the like noyse before time, and are afraid of nothing. And as you are riding together, cause three or four dags, or harquebushes to be discharged, first a prety way off, & then nigher hand according as your horse beginneth to abide them: during which time, cease not continually to make much of him, so wel with your hand, by clawing him on ỹ neck as also with your voice: and so by little and little, you shal bring him at length to abide any thing.

## Of the vices of the mouth, and causes thereof in generall. Chap. 20.

BEing now come to shewe you how to correct a horse that hath a naughtie mouth, aswell by vsing diuerse kindes of bittes méete for that purpose, as otherwise: I thinke it first méet to tell you the causes whereof such euilnesse of mouth procéedeth, and how many vices thereon dependeth: and finally how to correct the same. And first you shall vnderstand, that a horse may haue an euill mouth, either because his chin or beard where ỹ kirble should lie, is too hard, or the places where the bit should rest on both sides of his mouth, called of Grison, Lebarre, be too hard, or his tongue too hard: or contrariwise, for that all

these forsaid places perhaps are too tender, so as he dare not stay his mouth as he should, vpon the bit: againe, his mouth may bee too little, or his iawes may be too great and too thicke. Of which causes do procéede diuerse vices, as to draw vp the bit with his tongue, euen as though he would swallow it vp, not suffering it to rest vpon his gums or barres where it should rest: which vice Grison calleth, Beuer la briglia, that is, To drink the bridle: likewise to beare his tongue alwaies out of his mouth: also to beare too hard vpon the bit, which in Italian is as much to say, as Tirar di bocca: also to wrie with his mouth, holding the nether part thereof one way, and ỹ vpper part another way, which in Italian is to say, Far forfici: that is, To make sheares. There is also another vice like vnto this, but not so soule: that is, to wrie a little with his iawes aloft, but not so much beneth, which Grison called Ganheggire, a word deriued of this word Ganga, signifying the iaw: also to defend the bit with his nether lip, so as it cannot rest vpon his bars, called in Italian, Far Chiomazzuoli. Of some of which vices, there be also other particular causes, which shal be declared hereafter, when we come to the corrections of the same. But Grison sayth, that whilest som haue sought to correct these vices aforesaid, by often changing of rough & sharpe bits, they haue cleane marred their horses mouths: and therefore hee wisheth you in any wise to abstaine from all such kinds of bits, and to seeke rather to bring your horse to haue a good mouth, and specially whilest he is yong, by riding him with a gentle bit, and by bearing a temperate hand, vsing such helpes, corrections, and cherishings, as are taught before, whilest you teach him to tread the rings, w̃ trot, or gallop, to stop, to aduance, to turne, to manege, or to passe a cariere: which cariere, the more seldom it bee vsed, and with the lesse furie, the better mouth shal your horse haue: for assure your self, it is Art and good order of riding which maketh the good mouth, and not the bit. Notwithstanding the quality of the bit is not vtterly to be reiected: yea rather, when the horse beginneth to ware perfect in his doinges, and is well broken, and somwhat staied of head, it shall be very necessary to ride him with such a bit, as shal be most met to serue his mouth be it hard or soft, to the intent hee may beare ỹ lighter, and with

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the more stay, and also be the more subiect to his rider: for which cause Grison hath set forth in figures fiftie sundrie bittes together with the names and vses of the same, as hereafter shal be declared. But forsomuch as certain vices of the mouth, may be corrected as well by other meanes, as by the helpe of diuers bits, I wil first declare those kindes of corrections, & then afterward treat of the correcting with bits, and therewith shew you all the kindes, names, partes, and properties of the same.

## How to correct that horse which shall either draw vp the bitte with his tongue, or defend the same with his nether lippe. Chap. 21.

TAke a peece, of whip cord, about a spanne long, and tie the one end thereof vnto the eye of the bitte, vnder the kirble: that done, turne downe the horses nether lippe, to the intent you may easily bring the cord, betwixt his sayde lippe, and his nether gummes, vnto the other eie of the bit, and there to be tied and fastened, and the more the cord bee straiued, the harder and stronger shal the bit be. And if the knots at both endes be handsomly knit, no man shal perceiue the mystery thereof: or if you will, instead of the cord, you may there put a little cheane. And by this means not onely the vices aboue rehearsed, are throughly corrected, but also many times diuers other vices, as the putting out of his tongue, & bearing hard vpon the bit: and also the hardnes of his barres, so as he shal be able therwith to make no resistance. And such cord or cheane will do asmuch, being put to a plaine cannon or scatch, as if it were put to a harder bit.

## How to correct that horse, which will mowe or wrie with his mouth, and the causes whereof such vices do proceede. Chap. 22.

THough this vice doth chiefly procede of the naughtinesse of the horses mouth, yet many times the riding him with too high a port bit, which perhaps the horse cannot suffer, may bee cause thereof, or the distempered hand of his rider, not knowing how to handle him, and to make him to suffer the bridle, of what mouth soeuer he be, hard or soft. But to remedy

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the same vice proceeding of the first cause, vse to ride him with a musrol straight buckled to his head: and so often as he moweth with his mouth, correct him first wᵗ one spur, and then with another, but most with the spurre on the contrary side. And sometime also giue him the chocke with ẏ bridle, vpon the one or other, or else vpō both sides at once of his mouth, bearing alwaies a steedy and temperate hand: yea, and for his more correction, you may also sometime strike him with your stirrup or foot, vnder or vpon the shoulder on the contrary side, not failing to correct him sometime one way, and sometime another, so often as he shal offend: and at length you shal bring him from that fault well inough. But if the port of his bit be the onely cause of this vice, then you shal not need to vse these corrections, but onely to ride him with a close bit, or not so open, being hard or soft, according as the horses mouth shall require, whereof we shal now immediatly treat.

Of the kinds of bittes together with their names and parts belonging to the same. Chap. 23.

OF bittes some bee close and some be open. The open bits are otherwise called of our bitmakers, port bittes, of which portes some are whole, and some are broken. Againe, of the broken portes, some are fashioned like gèese necks, and they be round: and some like cats feete, and they be square, of which square portes so many as are made wᵗ Mines, peares, or campanels, Grison calleth them cats feet. But our bitmakers do call all kind of square ports, vpset mouthes without anie difference: also some of the broken portes and vpsette mouthes, are locked together with one plight within another, some with a rudet naile, & some with a peere: and according as euerie bit, as well of the close as open, is fashioned, so is it named. And therefore some are called Canon bits, some scatches, some melon bittes, some peare bittes, some campanels, or bell bittes, and some barbonets, and some Cattes feet. Of which names, the first foure are alreadie well knowne vnto our bitmakers, through ẏ help of old Alexander the Italian Rider, who taught them first, both the shapes, and also ẏ names of the same. And

since

since that time they haue also learned to make ẏ rest of the bits, though they haue not so many proper names for them, as Grisō giueth them: wherfore such names as they haue not, I trust it shal not grieue them to learne now at Grisons hand, & specially I englishing them so aptly as I can, vsing therein for the most part their owne tearmes. For I haue not bin negligent in learning at their hands, how to cal euery part of ẏ bit by his proper name, as the chéeks and eyes thereof, the ieiues, the rols, rings, & buttons, the whole port, broken port, or vpset mouth, with one plight within another, or with péece, ẏ trench, the flap, the toppe roll, and the watercheane, the nether cheanes, and ẏ kirble, and diuers other tearms belonging to their Art, not here néedfull to be rehearsed. Note also, ẏ of ẏ broken ports and vpset mouths, some be complete, and som be not. The complete be those, which haue both water cheans, and also trenches aboue: for the others haue but the one or the other onely: and for that cause I thinke Grison calleth them but halfe bits, as the halfe cannon, ẏ halfe scatch, the halfe cats foote, &c. But besides al this, he teacheth you of what fashion the chéekes ought to be made, to serue diuerse mouths, either short or long, right out or compassed: also of what height the vpper eies of ẏ chéeks ought to stand, and how highe the broken ports and vpset mouthes ought to be, & which kind of closing is best, either with one plight within another, or wt a riuet naile or with péece, and also how the whole port ought to be made: and finally how the kirble ought to be made. But for so much as the chéeks and eyes therof, & also the kirble, are members common to both kinds of bits, so wel to ẏ close as open, I wil therfore first treat of them and then of ẏ rest in their places, because the shapes of the close bits shall bee first presented vnto you: and next to them, the broken portes, vpset mouthes, and cats féete: and last of all, the whole portes, as wel without trenches, as with trenches aboue.

## Of the cheekes and eyes of bittes, and also of the kirble, and how they ought to be made. Chap. xxiiii.

VNtill your horse then be throughly stayed of head, and specially if he beare too low, and bring his head in too much, let the

the cheekes of your bridle bée right out, and not compassed: for the righter they be with the nether ends comming to the manward, the lesse the bridle shall force the horses head: yea rather, it shall make him to carrie his head the higher, and his mosell the more outward. But the more compassed the cheekes be with the nether end shooting out forward, the more they bring in his head: and therefore when the horse is once throughlie staid, it shal be most méete to vse the compassed cheeks, which besides making the horse to reane kindlie, doe also giue the better grace vnto the bit in his mouth, and doe make it the more comely and sightlie. Again, such cheeks must be long or short, according to the greatnesse of stature and strength of the horse, and also partlie according as hee beareth his head: for if hee be great of stature, and weake of backe, or carieth his head low and not steddie, then the cheekes would be somwhat longer than they be commonly vsed, and that shal make him to bear high, albeit such length must verie seldome be aboue a spanne: for vnlesse necessitie so requireth it is better that the cheeks be short than long, so that comelinesse touching the stature of the horse be obserued.

And note here by the waie, that according to Grison, the cheeke called of him Laguardia, is onelie that part which extendeth from the nethermost eie, susteining the reine downwardes: for all the rest vpward, he calleth Stanghetta, for the which our bitmakers haue no proper name: and therefore from henceforth I wil call it the heade of the cheeke, which head containeth the great eie, whereunto the reine is fastened, and a little hole aboue that, for the water cheane, and also the vpper eie, whereunto the portsmouth is put: which head together with the vpper eie, if it mount high, it maketh the horse to bear high, both w̄ necke and head: but if the head be short, so that the eie stãdeth low, then it causeth a contrary effect. But vnlesse som necessitie did otherwise force, I would wish it alwaies to bee in a meane, nether too highe nor too lowe, but answerable to the rest of the bit.

## Of the kirble.

NOw as touching the kirble, it would be good and strong, and made with round links, fashioned in this sort, like an S: Nether

cher doe I allowe for the moſt parte anie other faſhion to be vſed than this, how hard or tender ſoeuer the horſe be of chinne or beard: for the more that a hard chinne is broken with rough kirbles, as thoſe be which are made with ſquare linkes, and ſharpe pointed like diamants: the harder his chinne will be, through the cornie flethe which will growe thereon, when it is whole, and ſo make the horſe to care leſſe for the bridle than he did before. And againe, on the other ſide, though the horſe be neuer ſo tender of chinne: yea, & alſo verie tender of his barres or gummes, which kind of horſe is verie hard to finde, yet I would haue neither his bitte nor his kirble to be couered with cloth, as ſome men vſe to do. For though hee be ſo tender in deede, yet it is not that which will giue him boldneſſe to ſtaie his mouth vpon the bitte as hée ſhould do: yea rather, I would wiſhe you for a certaine time to ride him without anie kirble at all. And when ye ſée that he beginneth to ſtaie ſomwhat vppon the bridle, then make him a kirble of double fillet lace, otherwiſe called inkle, of an inch broade, tying it no ſtraighter, but ſo as it may kéep the bitte alwaies at one ſtaie in his mouth: which fillet, when he is once perfect, you maie take away, and put in ſteed thereof, the kirble before declared: or if you will, you may make him a kirble flat & ſmooth, like a flaggon cheane, and that perhaps ſhall offend him leſſe.

Of cloſe bits, for what mouths they are moſt meet, and alſo what vices they doe correct, which vices you ſhal eaſily finde by the titles following, and the faſhions of the bits, by the numbers ſet in the margent anſwering the numbers of the figures orderly, ſet altogither in the latter end of this booke. Chap. xxv.

FIrſt then you ſhall vnderſtand, that cloſe bits are onelie meete for horſes of a good nature, at the leaſt of not too froward a nature, whoſe mouthes ſuch bits maie eaſilie frame: yea, and ſome of them are more méete to be vſed in the firſt breaking of a horſe, than any other bitte, as I tould you before in the firſt booke, willing you to ride your horſe firſt with a Cannon bitte with right cheekes, of what mouth ſoeuer he be: yea, and vntill hée be throughlie ſtaid of head, and perfect in all his doinges, I would neuer haue you to change it.

For

For a gentle mouth.

But afterward if your Horse haue a gentle mouth, then you may ride him with a Cannon, hauing compassed cheekes. 1

For a mouth something hard.

If his mouth be somwhat hard, then you may ride him with a scatch. 2

For a tender mouth, and not great.

If his mouth bee not great, but tender and good, then besides the foresaid bits, you may very well vse a smoth Melon bit, hauing onely a water cheane aboue, and such melons may be made like oliues. 3

Against defending with the lip.

Take a Melon bit, let the melons be somewhat rounder and greater, hauing on eth outside a playing ring, or else two rings nert vnto the middle ioint as you may see in ỹ fourth and fift figure. But it were more to the purpose, to take a peare bit, or a round campanell, otherwise called a round bell bit, or else a flat campanel: I call it flat, because the ends thereof are not rising and embossed out, as the other is. And let not the peares of the peare bit, or the belles of the bell bit, be made with many edges or squares, for they are naught, but let them be smoth and round. And if either of them haue a playing ring on ỹ outside, it shal be so much the better to keepe his lippe away: or else two playing rings nert to the middle ioint, of all which fashiõs you haue example in the 6. 7. 8. 9. 10. 11. 12. figure. 4 5 6 7 8 9 10 11 12

For the same fault, and for holding out his tongue.

You may also take for the same vice a scatch with a turning roll or button on each side: and the greater such rols be, the harder shal the bit be: albeit I would wish them to be of a mean big nesse, yea rather, to bee small and not verie high rising. At the ends whereof, on either side nert vnto the middle ioint, may bee put two playing rings, yea and if the rolles or buttons be not ouer broad, you may put three playing rings on a side: and such kind of bit is very good for a horse that wil put out his tongue. 13 14

Other

Other bits for the former fault of the lip, but not to bee vsed verie often.

Though some for the same fault vse to take a double peare bit, or a double campanel, that is to say, hauing two pears, or two bels, on a side, or els a baſtonet, which may be otherwise called a ieiue bit, with round buttons, or rough rings made high like wheeles, yet I counsel you not to vse them but very sildome, and specially the baſtonet with rough rings.

And note, that though roũd melon bits, campanels, scatches, and baſtonets with buttons, be close bits: yet they be somewhat like vnto the open bits, in that they partly giue libertie vnto the tongue: but beware that you make none of these bits, or any other with a gage or spoon in ỹ middeſt, as was vsed in olde time, and is yet at these dates in some places of the world, for that is very naught. But if you would giue your horse some thing to play on: then in stead of such gag or spoone, you may place in euerie one of these bits a playing ring or two, on each side next to the middle ioint: and though there were none at al, it maketh no great matter.

## Of open bits in generall. Chap. xxvi.

Hauing sufficiently spoken of close bits, how they ought to be made, and whereto they serue: I purpose now to speak of the open bittes, otherwise called port bittes, which bee of more value, because they set the tongue at more liberty, which can make no resiſtance, the bit being out of his reache: yea, these bits be so proper to correct any vice of the mouth, as by the helpe of them ioined with Arte, and good order of riding, any horse may be made to haue a good mouth. And first, beginning with the broken ports, and vpset mouthes, I wil shew you how such portes, and vpset mouthes ought to be made, and how they may be locked, ioined or fastened together, & which kind of locking is beſt: and then what vices they doe correct, obſerning for the finding of the vices, and fashions of the bits, the order before declared and kept.

Of

## Of broken ports & vpset mouthes, how they ought to be made, and what vices they doo correct. Chap. 27.

YOu shall vnderstand then, that so wel broken portes as vpset mouthes ought to bée made all of one péce together with the teines, and so to rise vppe with a round or square, méeting onely in the toppe, whereas they must bee ioyned together with a riuet nail, or with one plight within another: or else with a péce, according as shall be most méet to serue the horses mouth. For a riuet or péce doth make the bit harder, than when it is locked with one plight within another. And therefore such portes as are ioyned with one plight within another, are méetest for most mouthes, and doo best stay both head and necke. And note that the square ports, otherwise called vpset mouthes, must not be fully so wide in the top as they are beneath, neither must they, or the round ports, bee too high, or too lowe: for as ouer high forceth too sore, so ouer lowe giueth too little libertie. And therfore I would with them to be in a mean, according as ỹ horses mouth shal require: but so, as it may giue liberty vnto his tongue, and not hurt the rose of his mouth for that were a foule fault, and yet little considered in times past.

### For a horse that hath tender barres, and doth swallowe vp his tongue.

TAke a halfe Canon with a broken port, without any trenches aboue. And if you will, such a broken port may be ioyned with a riuet naile. But it would be better, if it were ioyned with one plight within another, hauing only the water cheane aboue, according as you may see in the first fiue figures of brokē ports and vpset mouthes, whereof some be ioyned with riuets, some with one plight within another, & some with péces. 1 2 3 4 5 6

### For a horse that hath not tender barres, and yet swalloweth vp his tongue.

TAke a Cannon with an vpset mouth complete, hauing trenches aboue full of little playing rings, beads or buttons, and such Canon may also bee ioyned with a péce. Or else take a halfe Canon with an vpset mouth, hauing trenches aboue, 7 8 9 10

aboue, fastened in the place of the water cheane: or if you will, for the same vice you may take halfe a Scatch with a broke̅ port or vpset mouth, wrought like vnto the halfe Canon, as before said. Of al which fashions you haue examples in the 7, 8, 9, 10, 11, 12, 13, 14, and 15 figures.

*For a horse that hath somewhat hard barres, and swalloweth vp his tongue.*

TAke a Scatch with an vpset mouth compleat, and such vpset mouth may be ioyned with one plight within an other, or else with a peece, which peece as it giueth the tongue more libertie, so it maketh the horses mouth more subiect.

*For the same vice, and for defending with the lippe.*

YOu may for the same vice make both this Scatch, and also the close Scatch with a round welt, about the bignesse of a good big packe threade on the inside, so well aboue as beneath: which pinching him on ỹ bars in his mouth, will not onely make him the more subiect, but also let him from defending with ỹ lip. The fashion of which bit is plainely set forth in the 18. figure.

For a horse that will draw vp the bit with his tongue.

TAke a halfe Scatch with an vpset mouth, hauing a trench aboue in the place of the water cheane, as you may see in ỹ 19. figure. A halfe canon also made in like sort doth correct the same vice, whereof you had an example before in ỹ ninth figure.

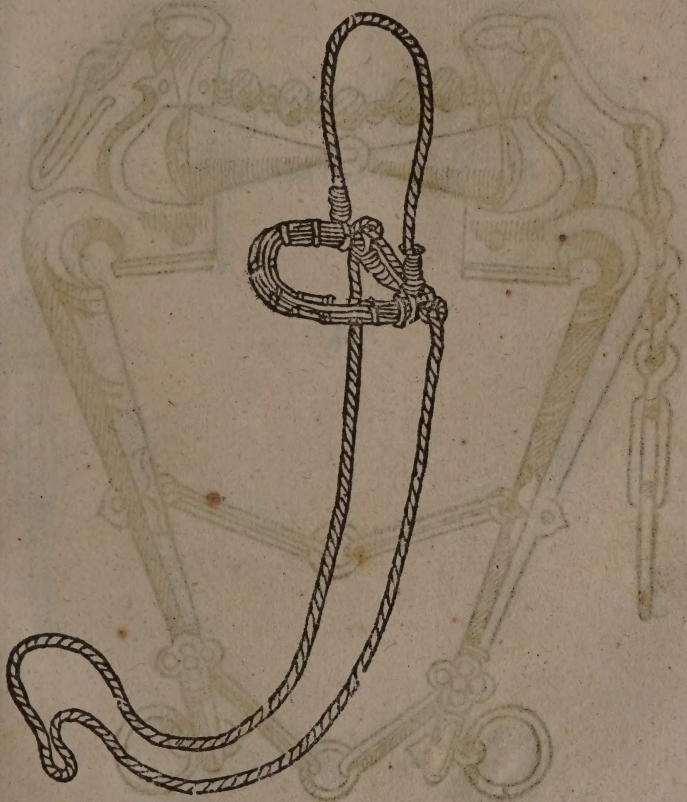
*For a horse that hath a little mouth, and hard barres.*

TAke a Cats sot or vpset mouth complete, made with smoth Melons or Oliues. But if the mouth bee great and hard, let such bit be made with peares, or else with belles, otherwise called Campanels. Of all which sorts you haue examples, in ỹ 20, 21, and 22 figures.

*For a horse that hath a drie mouth and hard, and reaneth low, and perhaps defendeth with the lip.*

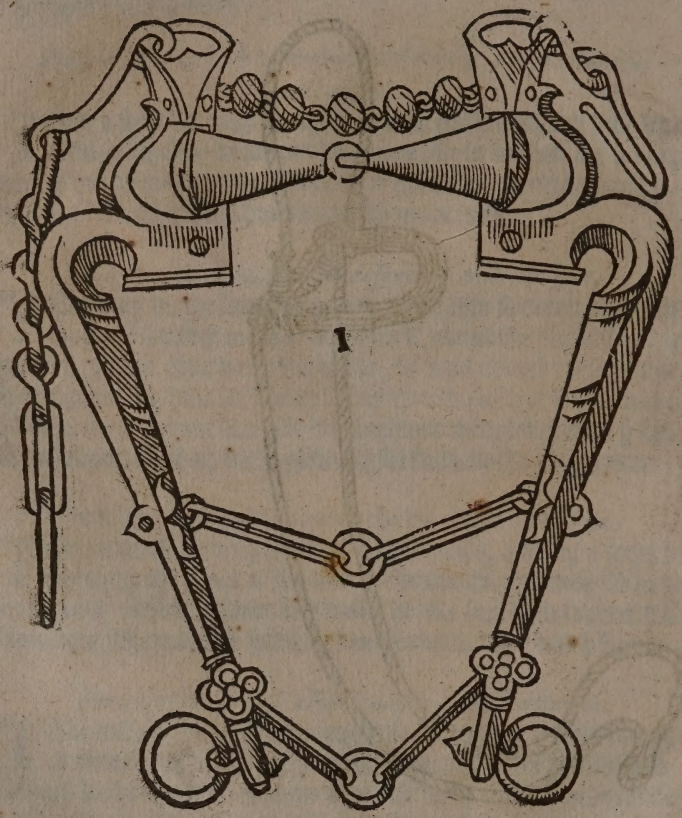
TAke a halfe Cattes sote, made with smoth Melons, or with peares, or else with Campanels, if hee defendeth with ỹ lip, the

The ſhape or figure of the head- 56
ſtraine, to be made of good
round corde.

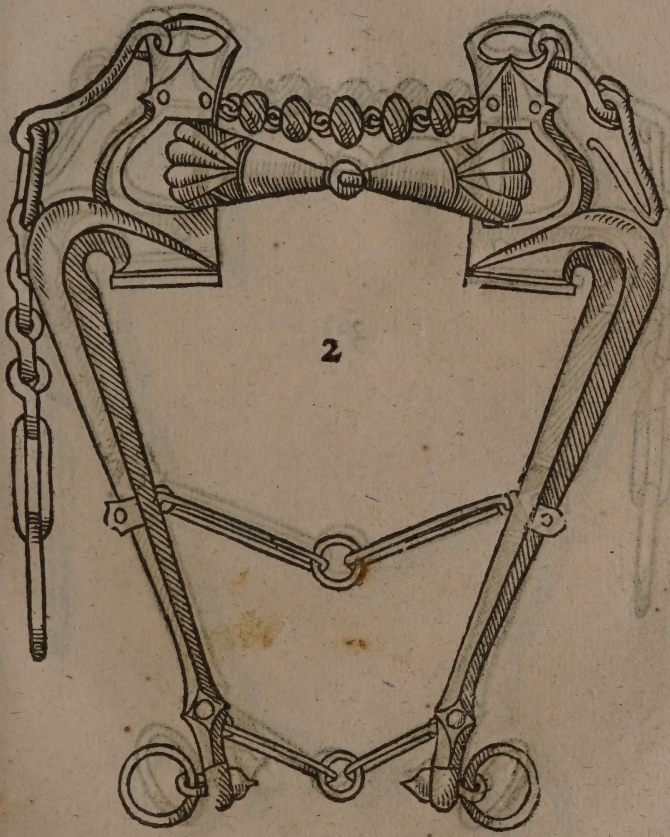


## Close bittes.

## A plaine Canon.

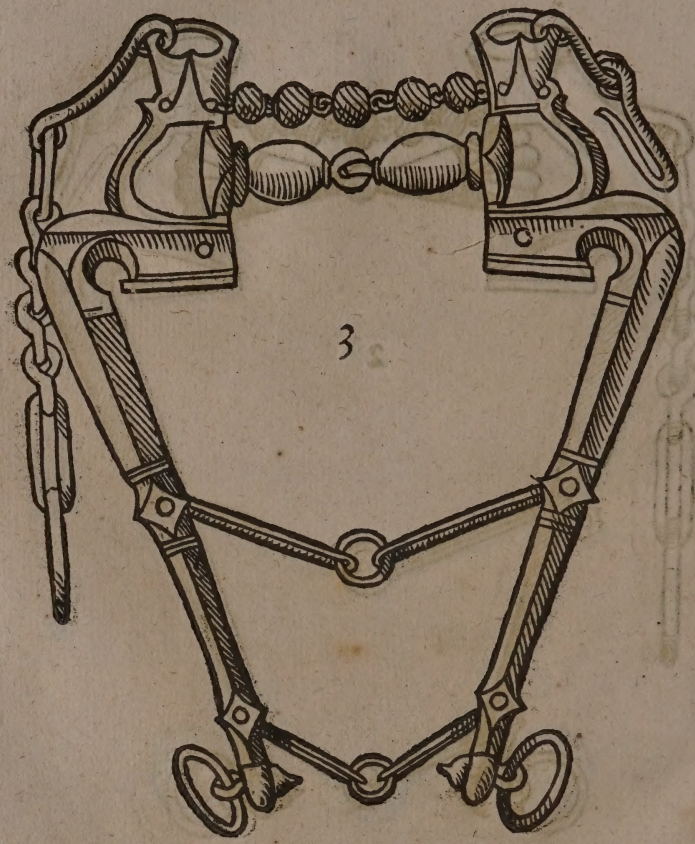


## A plaine Scatch.

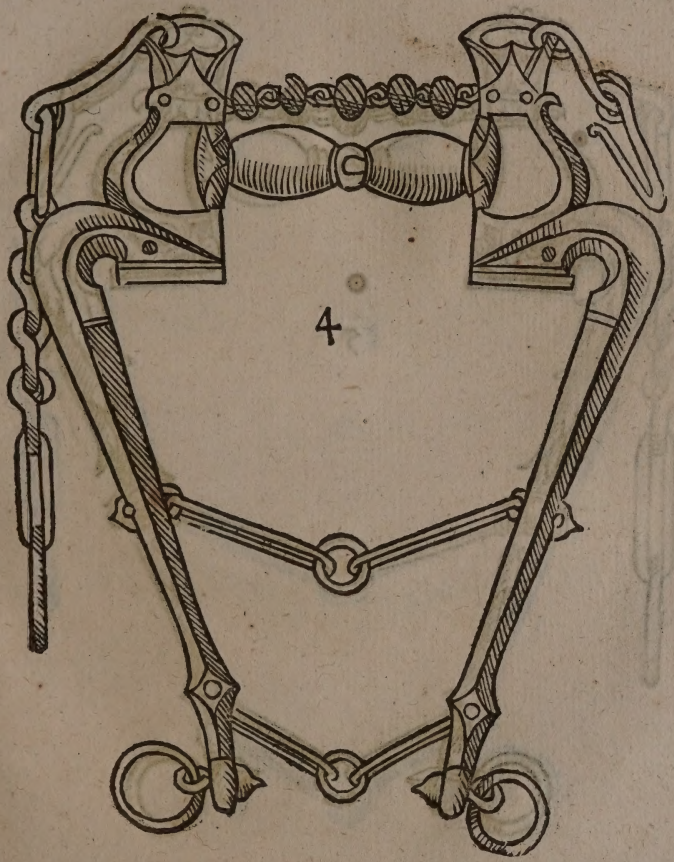


2

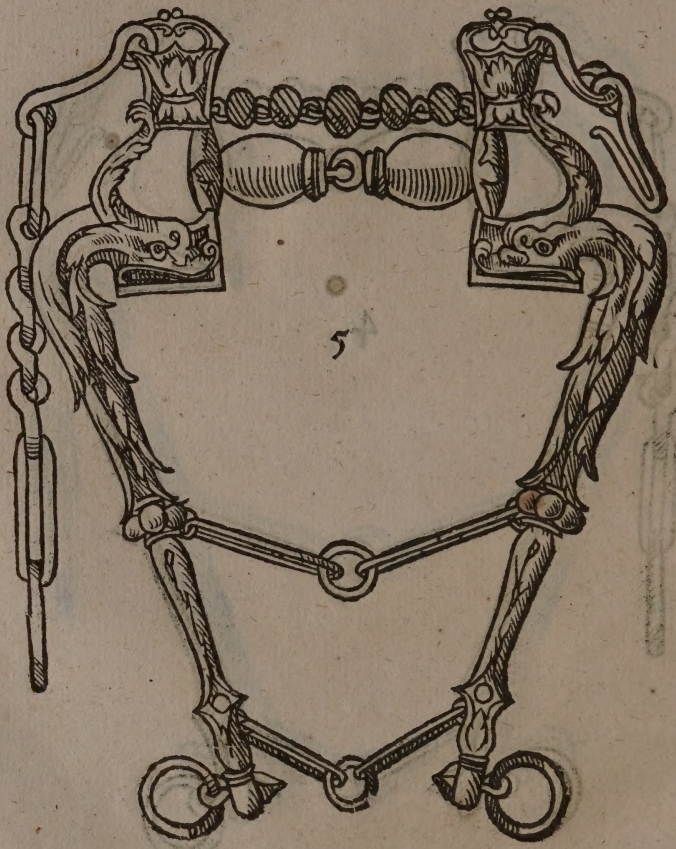
## A smooth Melon bit.



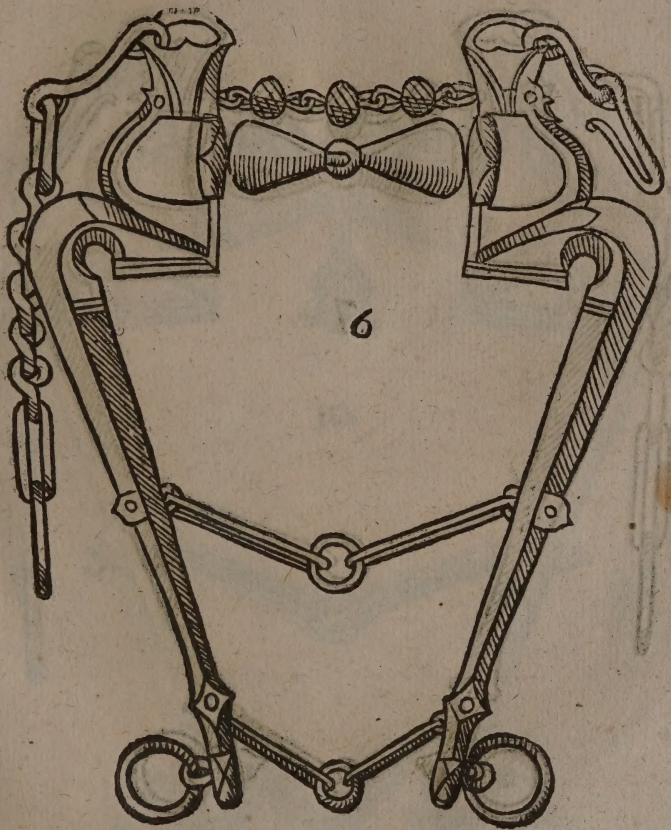
A smooth Melon bit, somewhat rounder than the other.



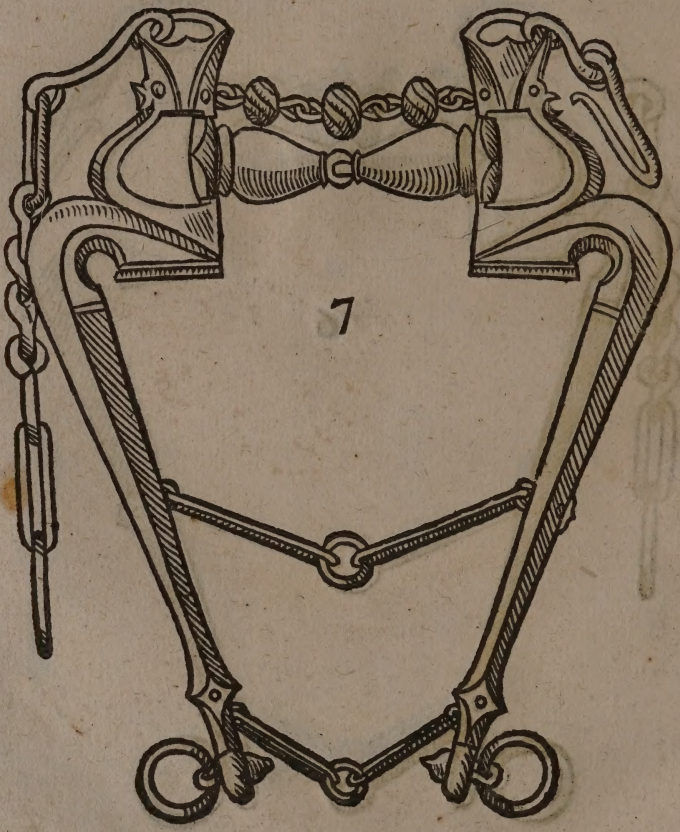
A Melon bit, hauing on each side 2. plaieng rings next the middle ioint.



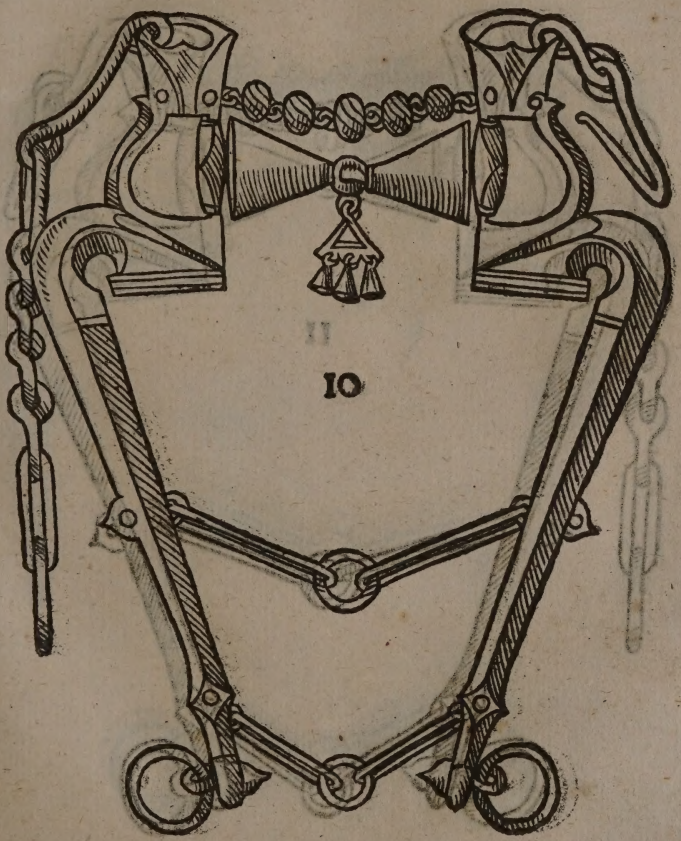
## A Peare bit.



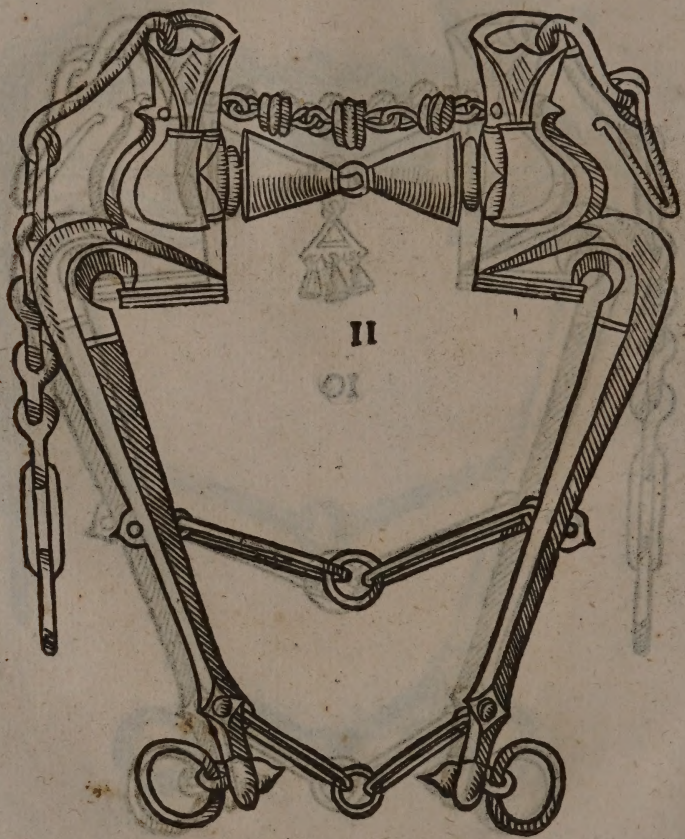
A peare bit, hauing on each outſide one plaeng ring.



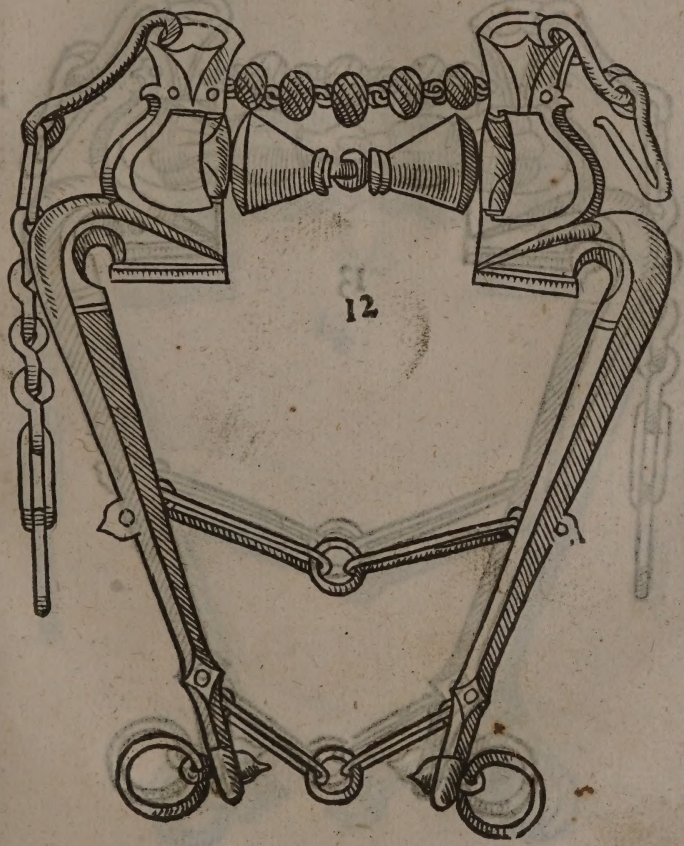
## A flat Campanell.



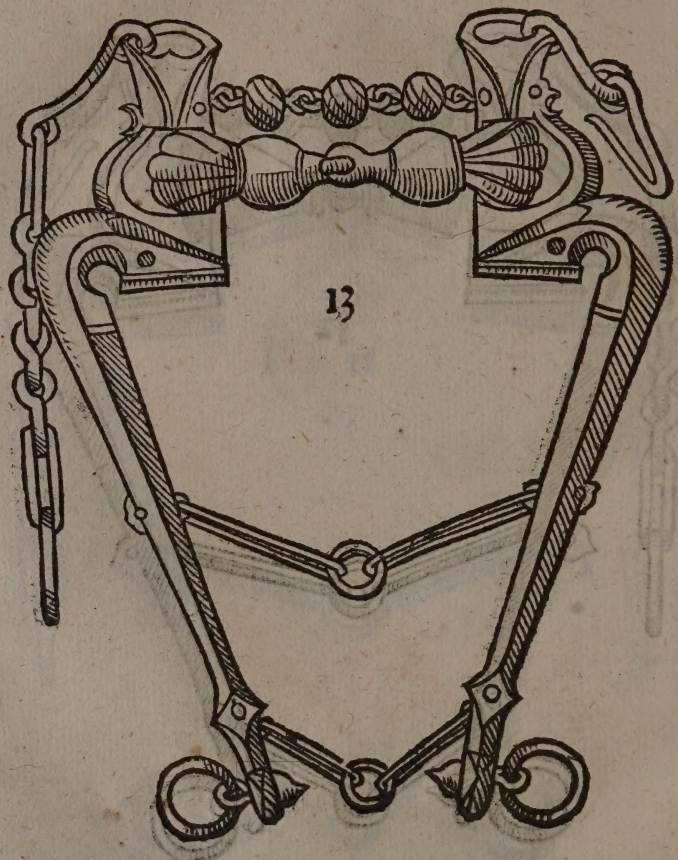
A flat Campanell, hauing on each out-side one plaieng ring.



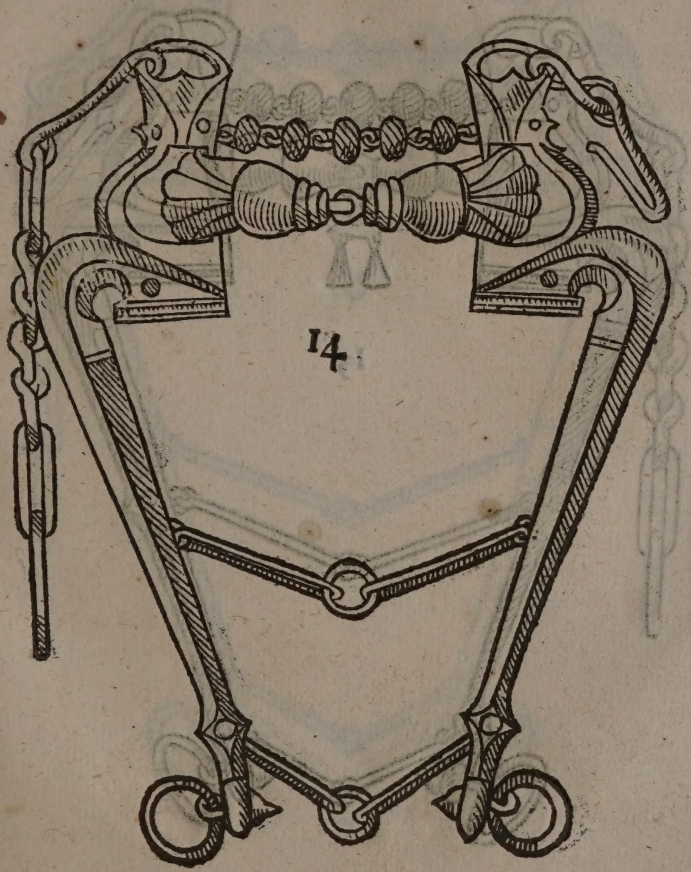
A round camparnell, hauing on each side two plaieng rings next the middle ring.



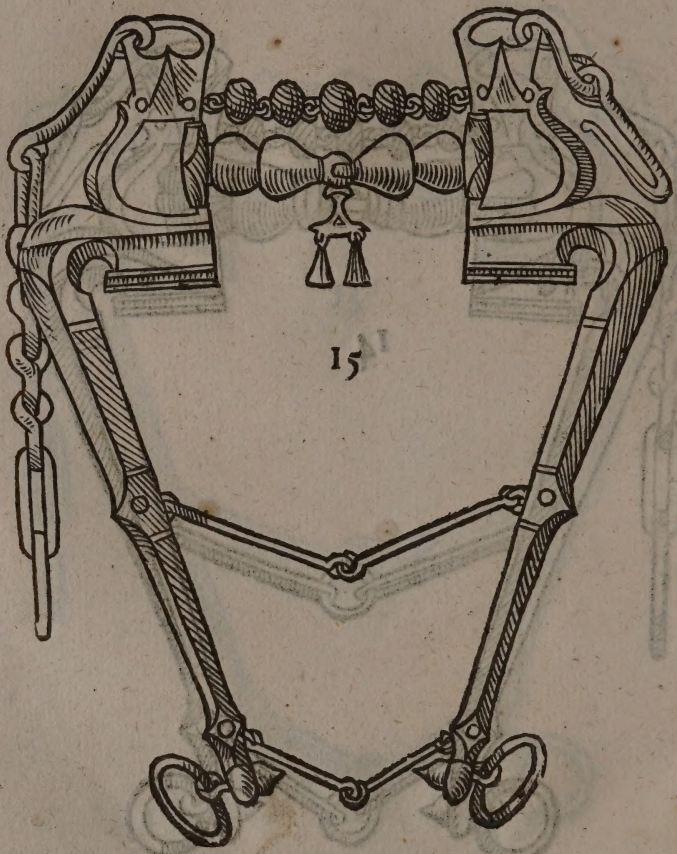
A Scatch with two turning rolles or buttons.



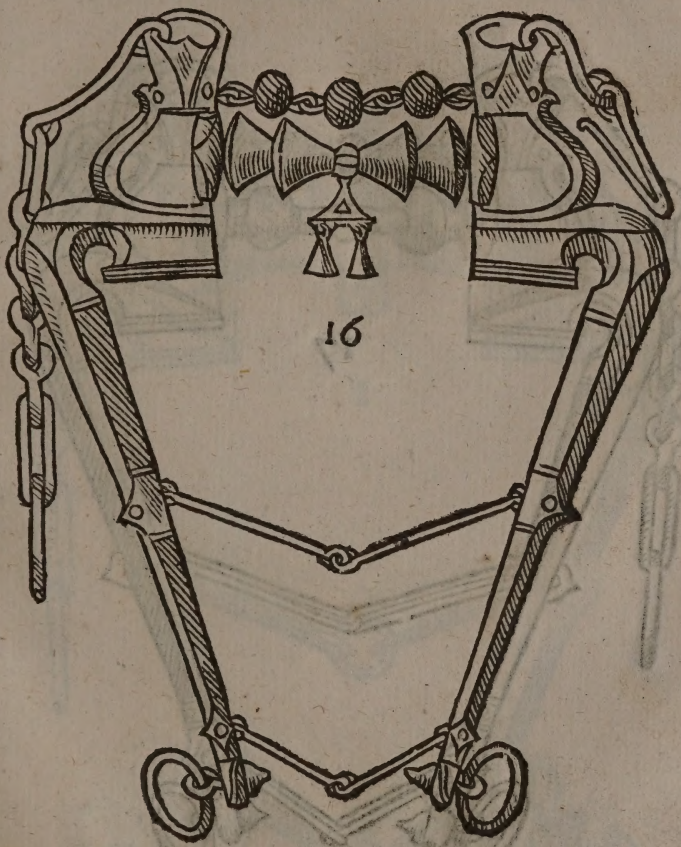
A Scatch With two turning rols, hauing on each side three plaieng rings nert the middle ring.



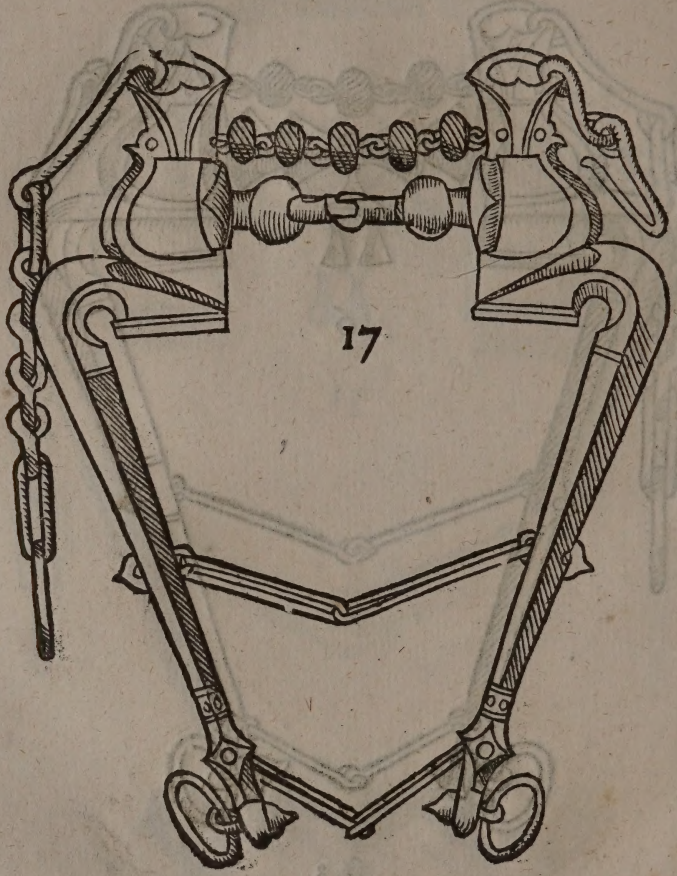
## A double Peare bit.



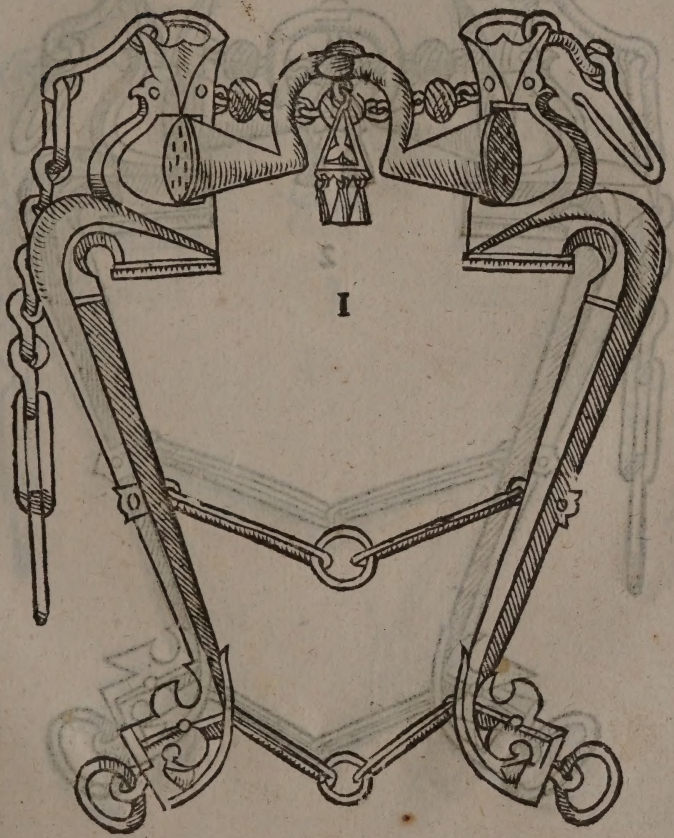
## A double Campanell.



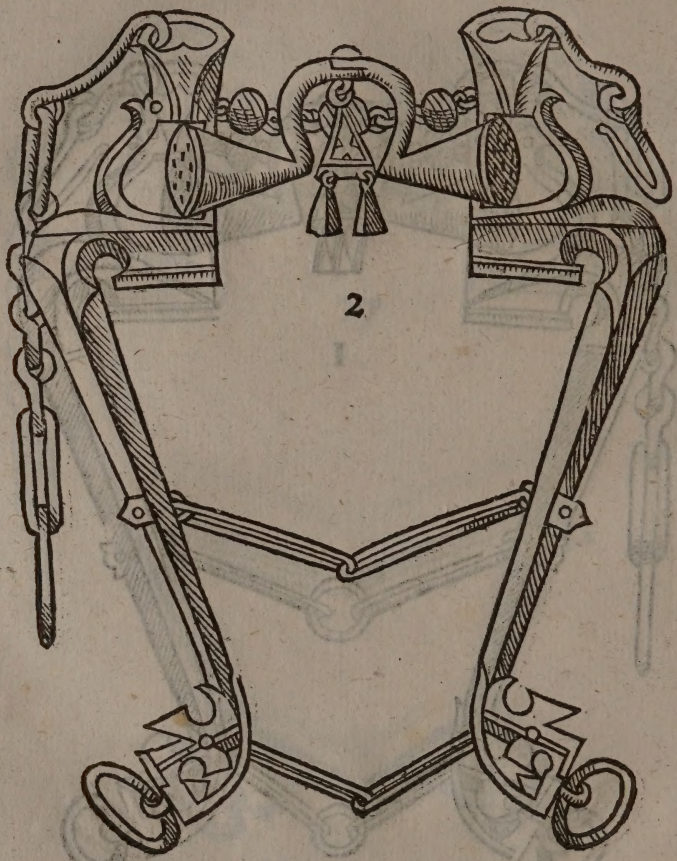
## A Bastonet or Jesue bit, with two turning buttons.



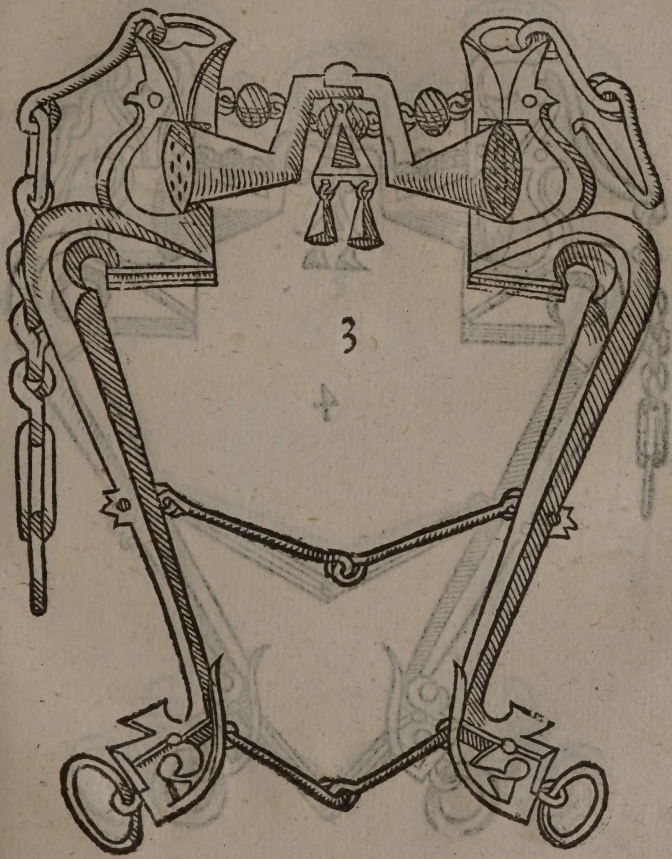
## A halfe Canon with a broken port ioined with one plight within another.



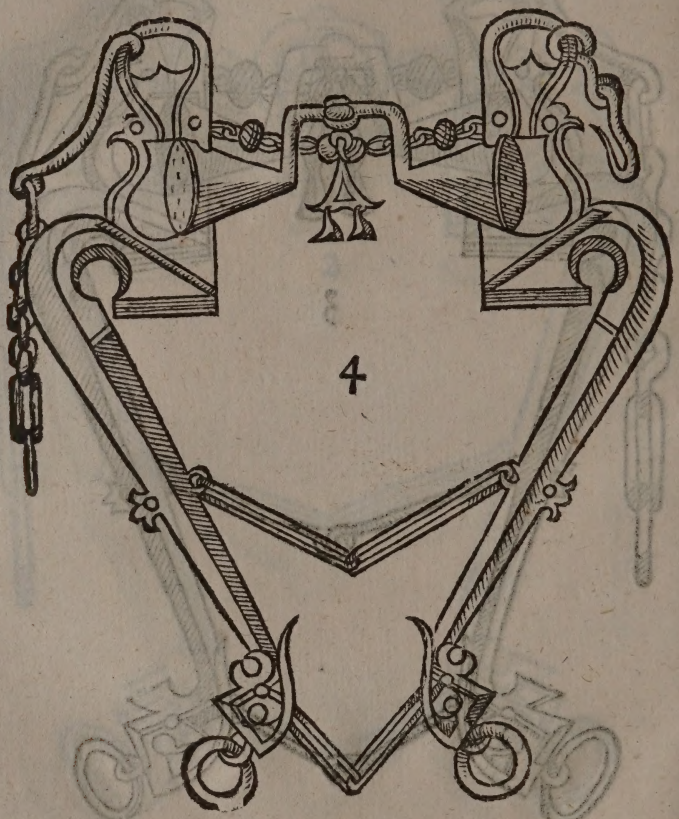
A halfe Canon with a broken port, ioined with a riuet naile.



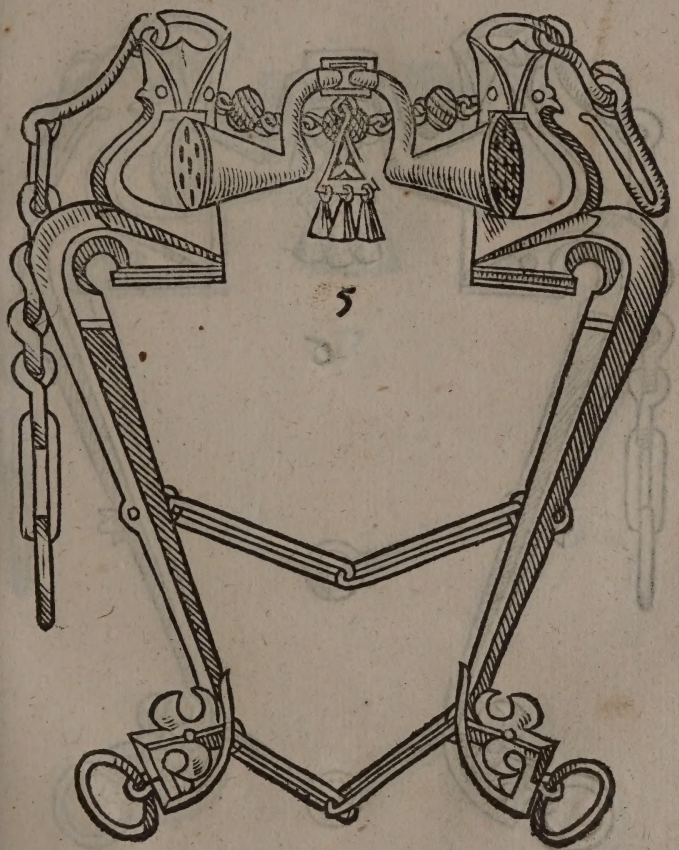
A halfe Canon with an vpset mouth, ioyned with a riuet naile.



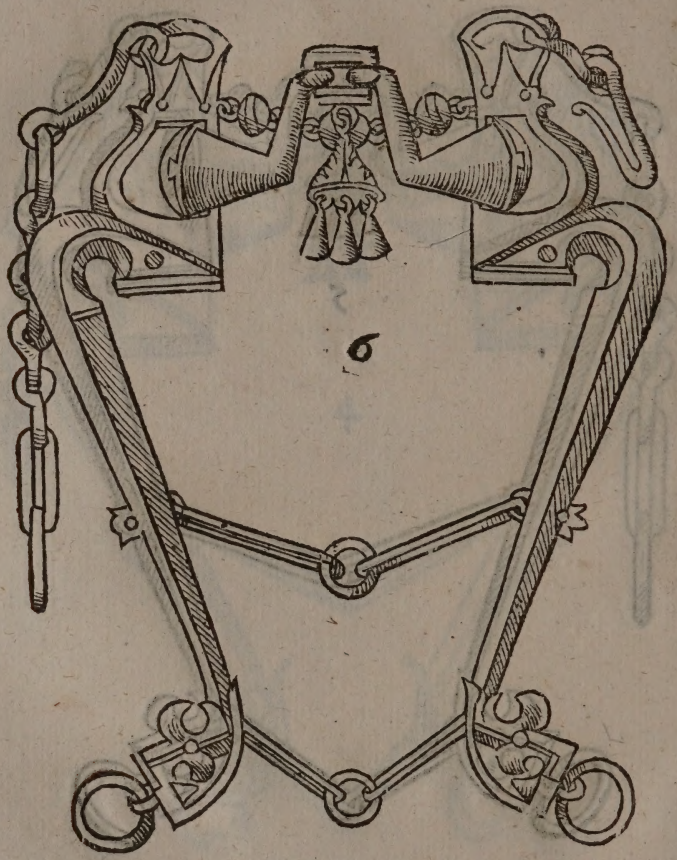
A halfe Canon with an vplet mouth ioyned with one plight within another.



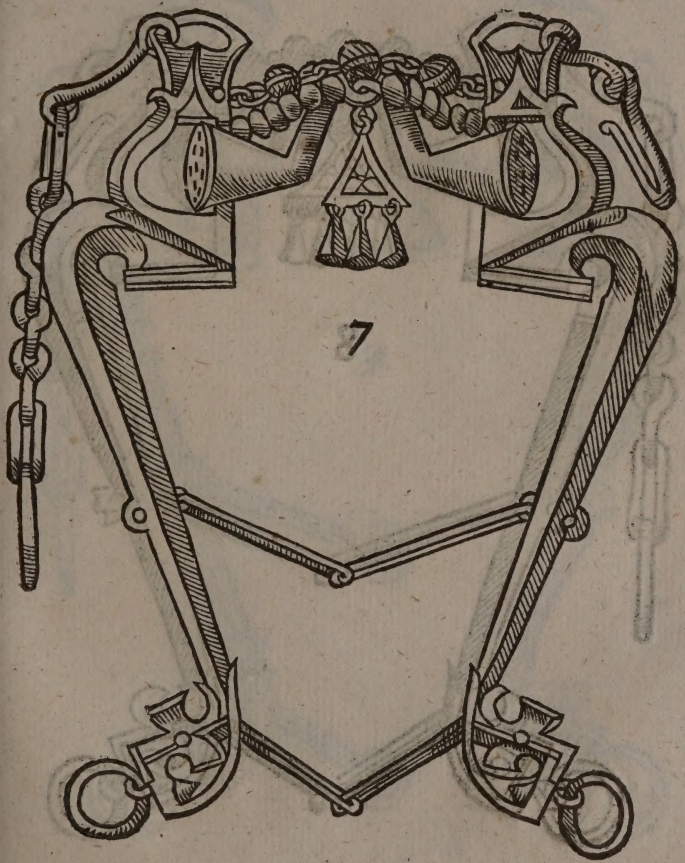
## A halfe Canon with a broken port, ioined with a peece.



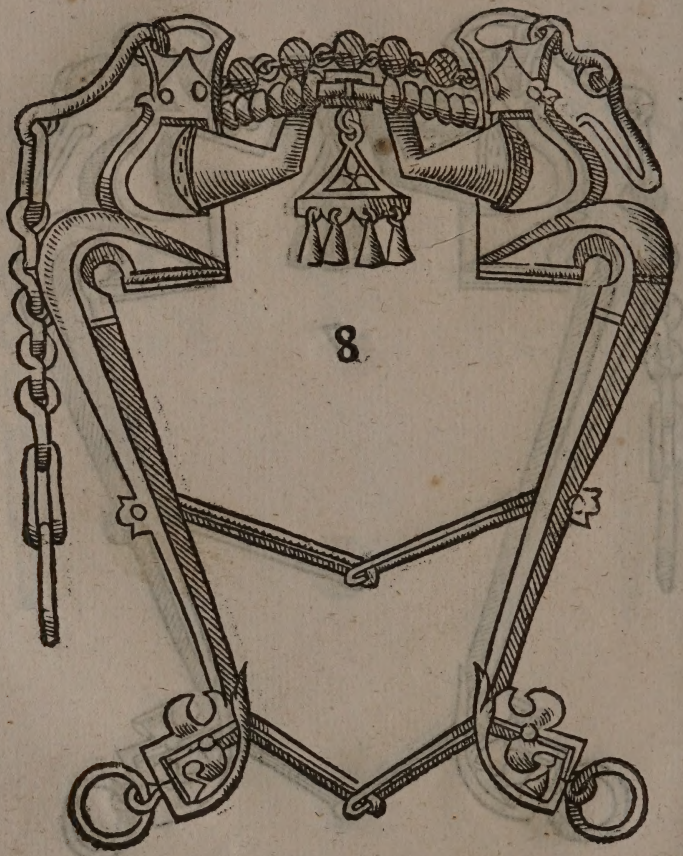
A halfe Canon with an vplet mouth, ioi-
ned with a peece.



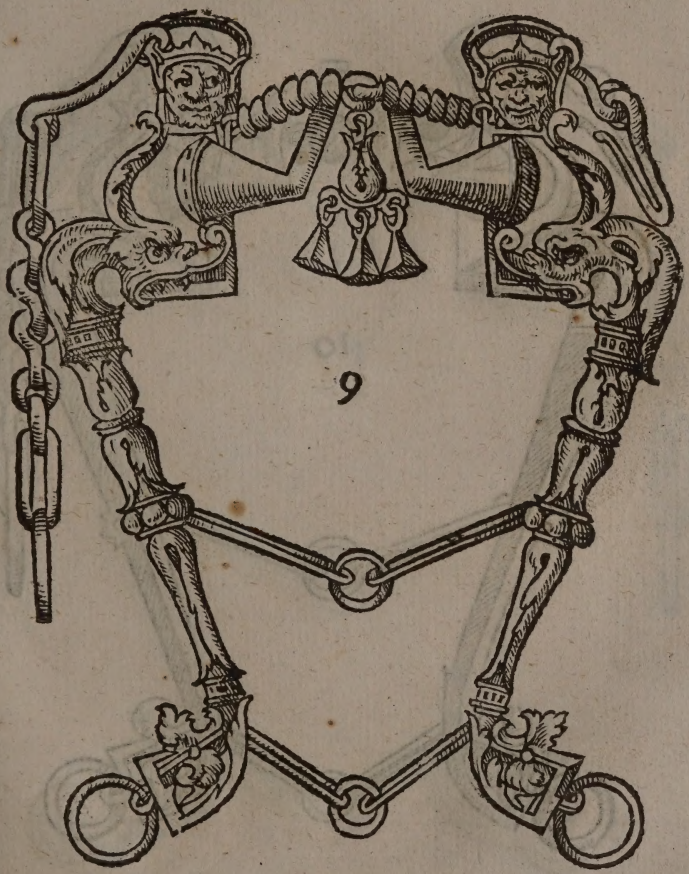
## A Canon with an vplet mouth complete.



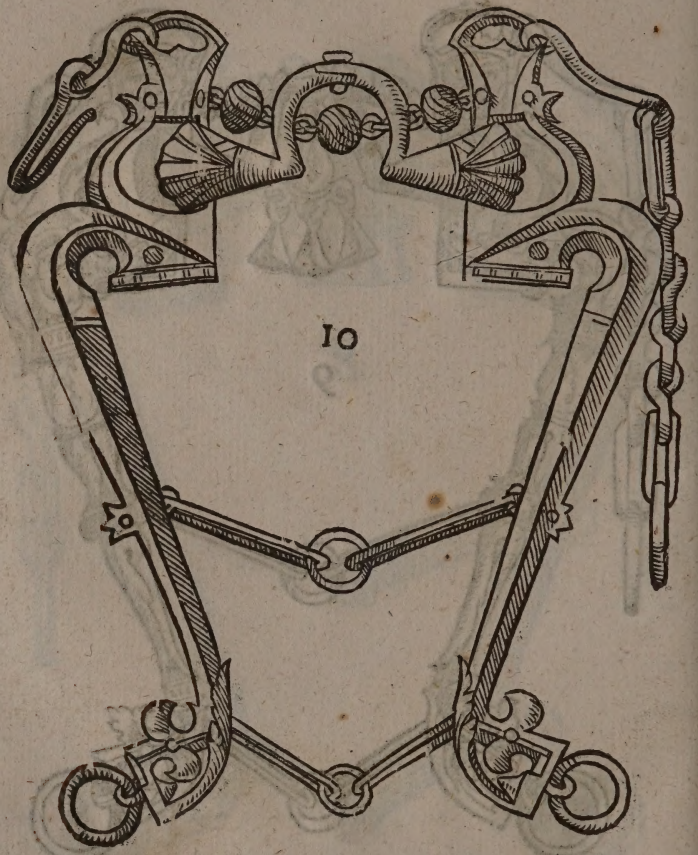
## A Canon with an vplet mouth complete, and ioined with a peece.



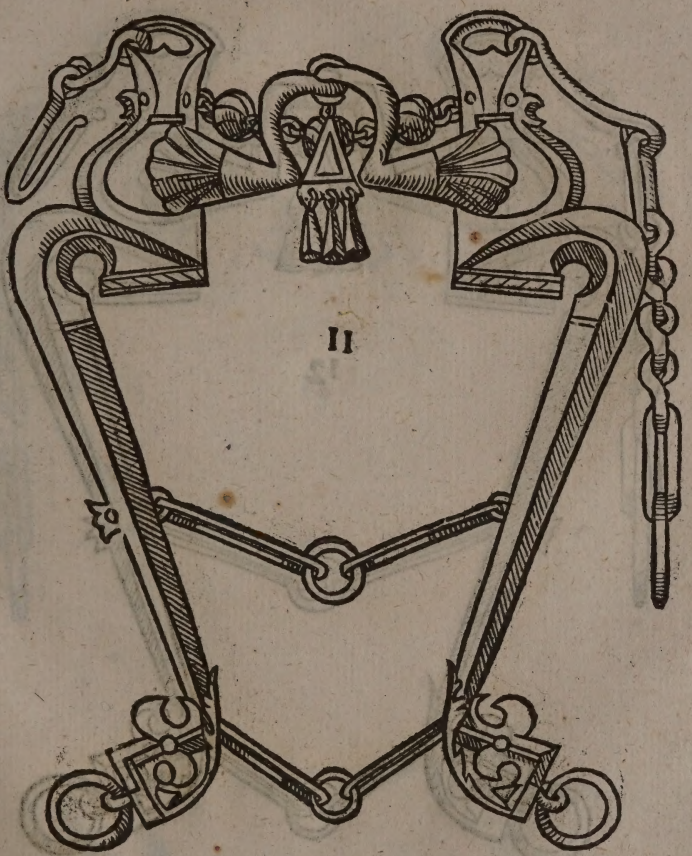
## A halfe Canon with an vplet mouth, hauing trenches aboue.



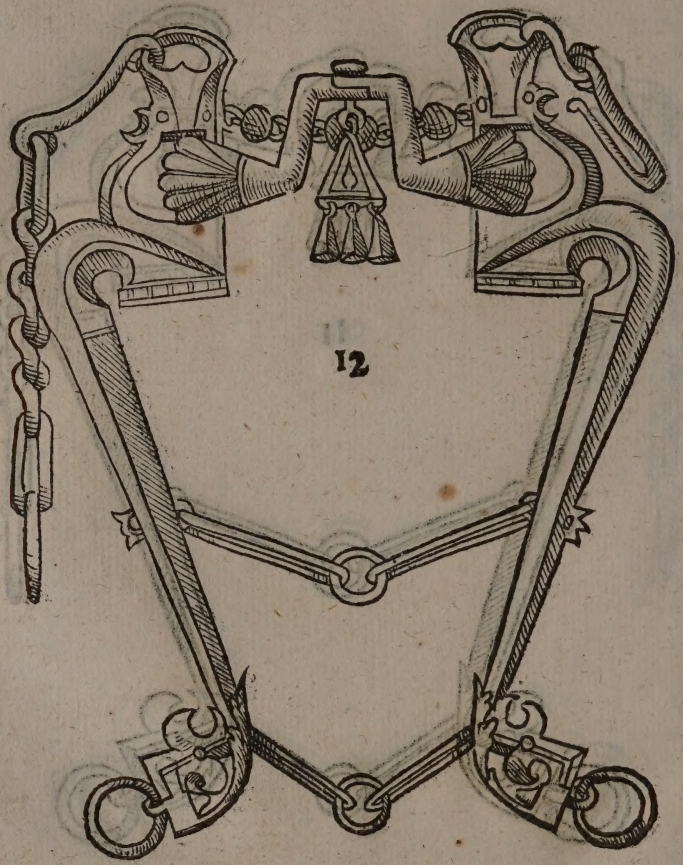
A halfe Scatch with a broken port, ioined with a riuet naile.



## A halfe Scatch With a broken port ioined With one plight Within another.

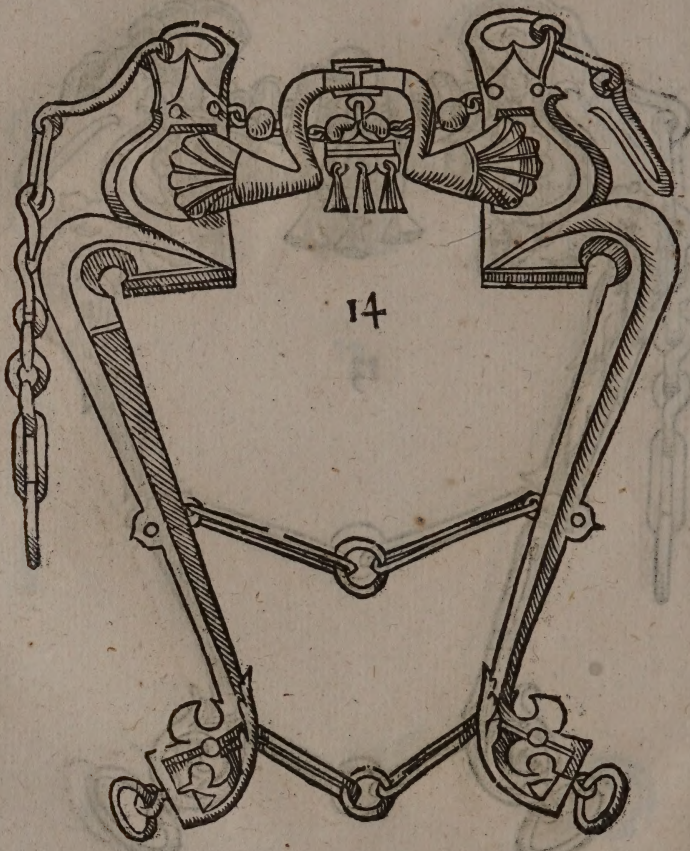


A halfe Scatch with 'an vplet mouth
ioined with a riuet naile.

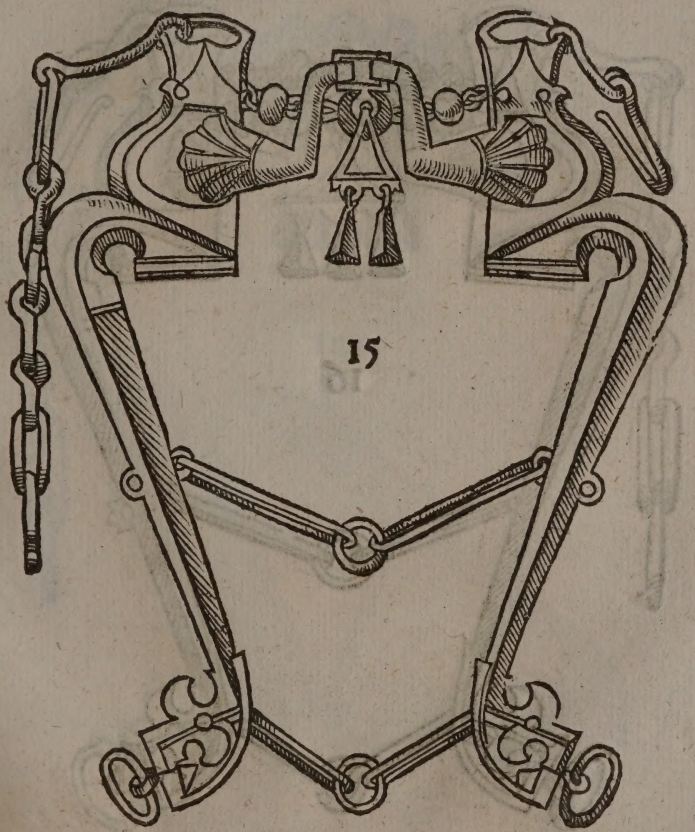


## A halfe Scatch with an vplet mouth ioi= ned with one plight within another.

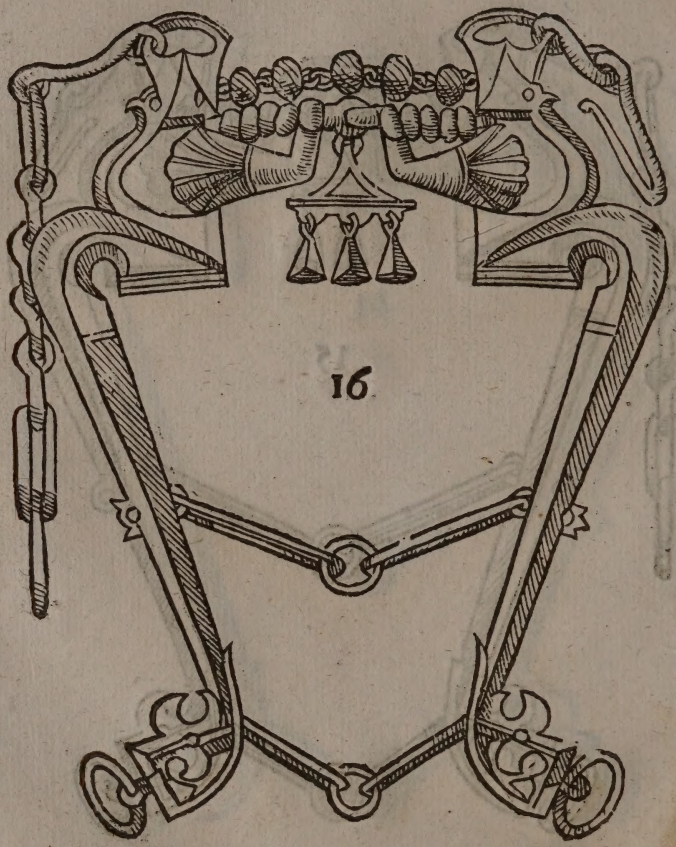
A halfe Scatch with a broken port
ioined with a peece.



## A halfe Scatch with an vpſet mouth, ioi-ned with a peece.



## A Scatch With an vplet mouth complete.



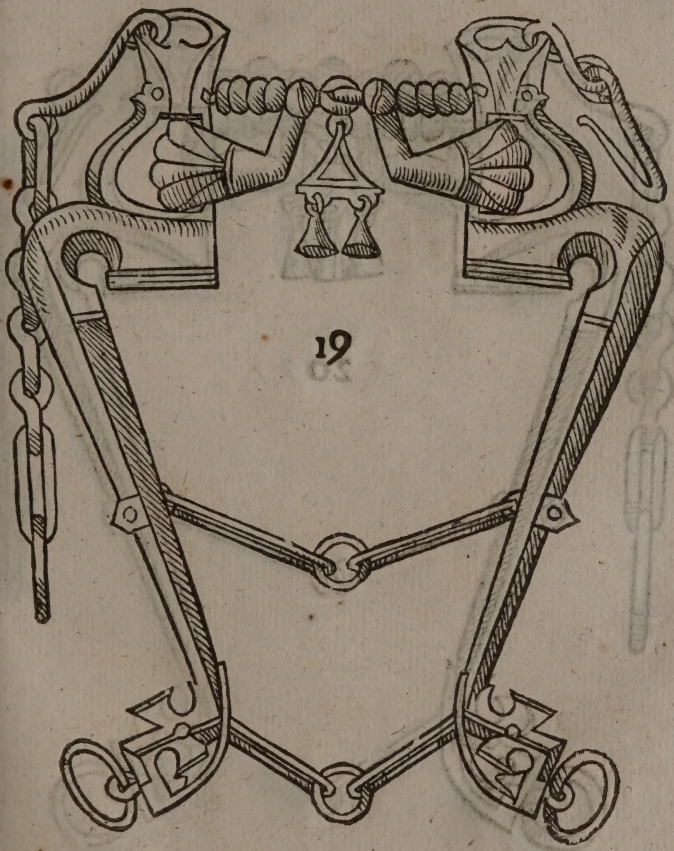
## A Scatch with an vplet mouth complete, and ioined with a peece.

17

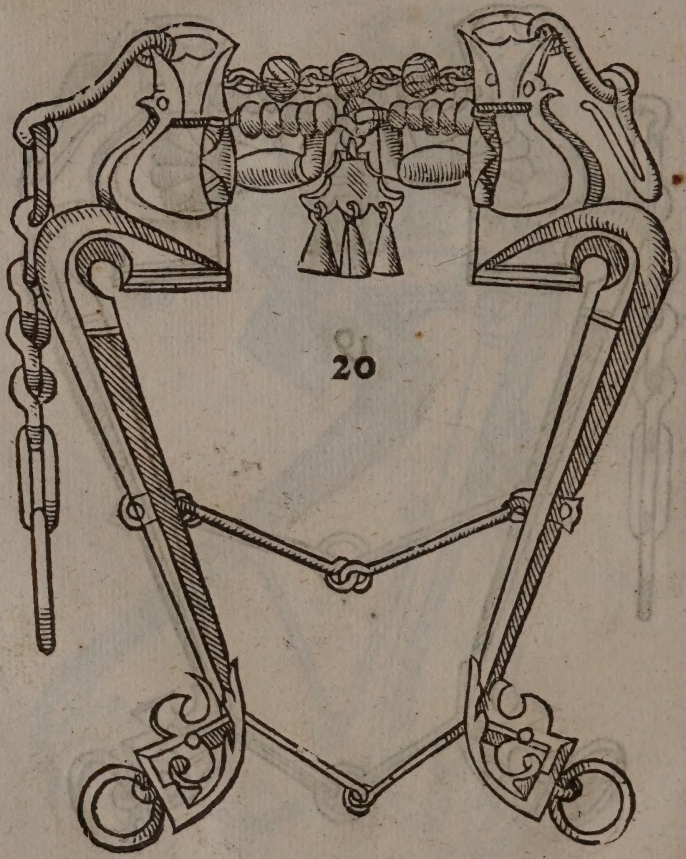
A half Scatch With an vplet mouth, With the inside tunned out warde, to shewe the Weltes.

18

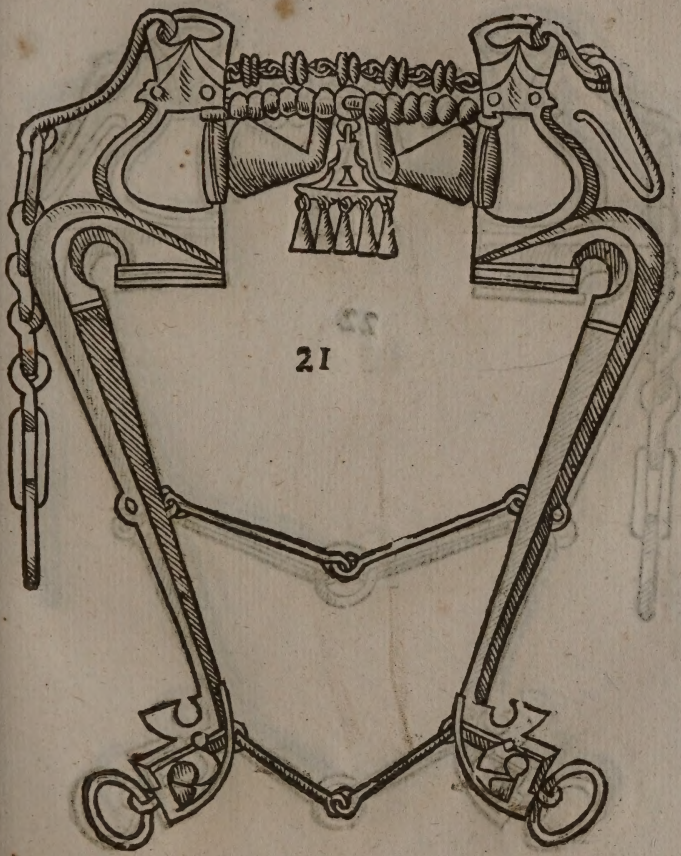
## A halfe Scatch with an vplet mouth, hauing a trench aboue.



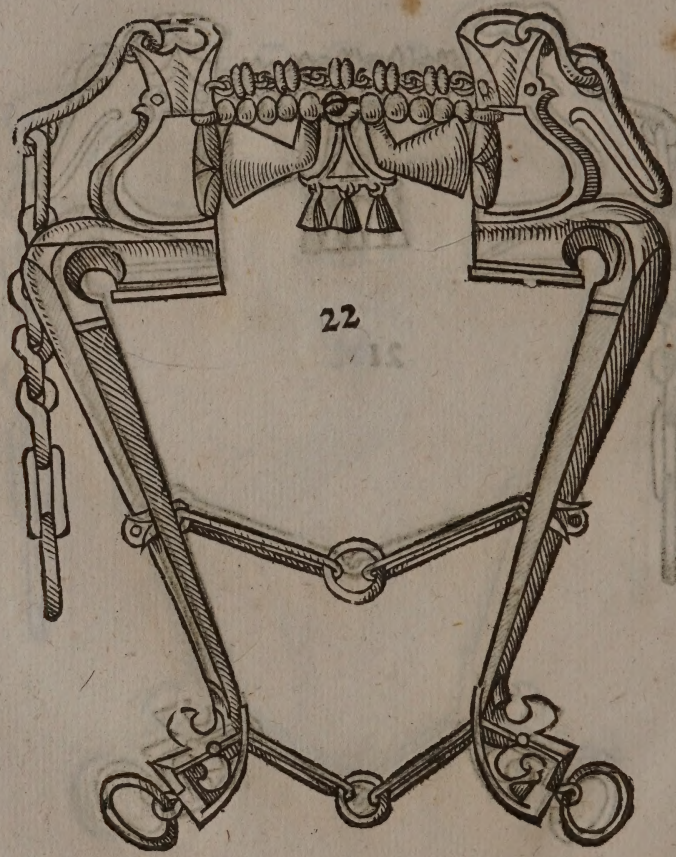
## A Cattes foot or vplet mouth complete with smooth Olives.



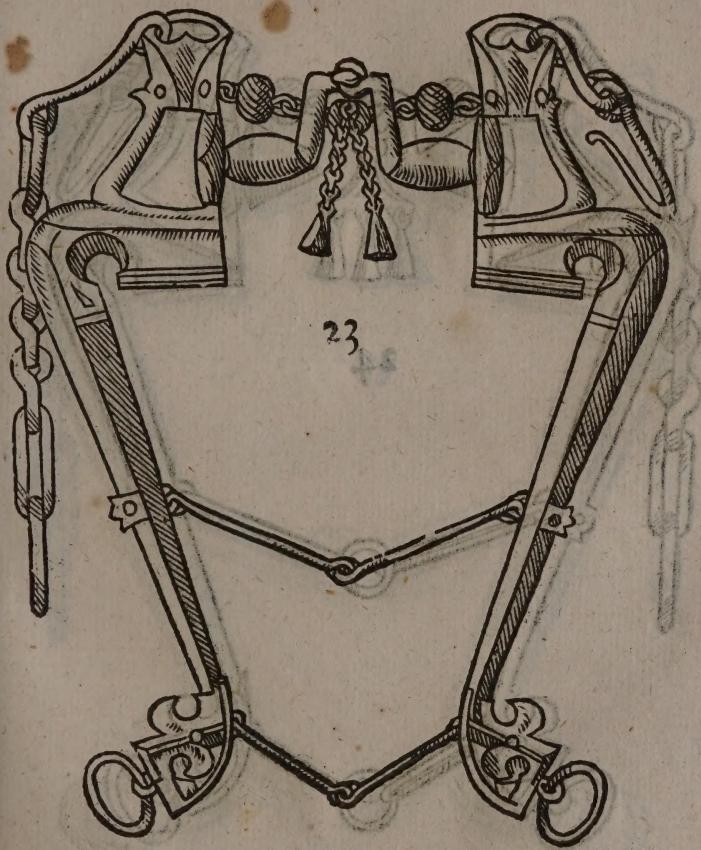
## A Cattes foote with peares complete.



## A Cattes foote with Campanels complete.

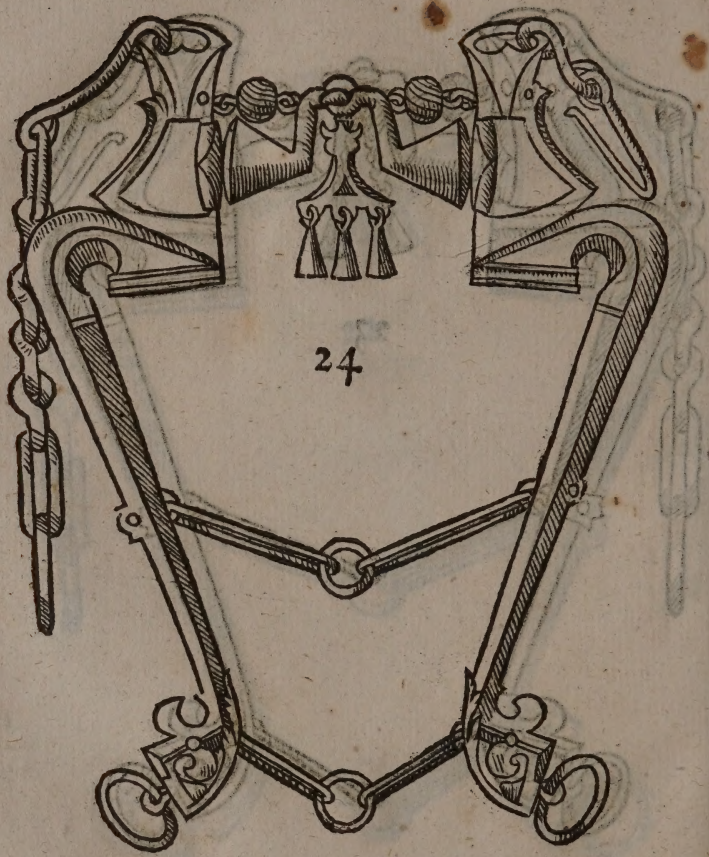


## A halfe Cattes fæte with Oliues.

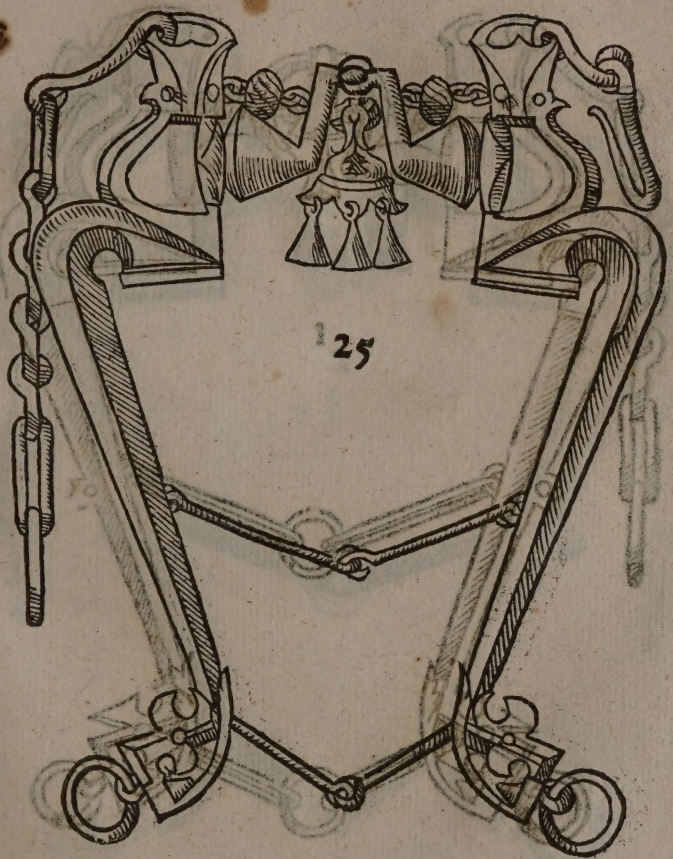


Broken portes and

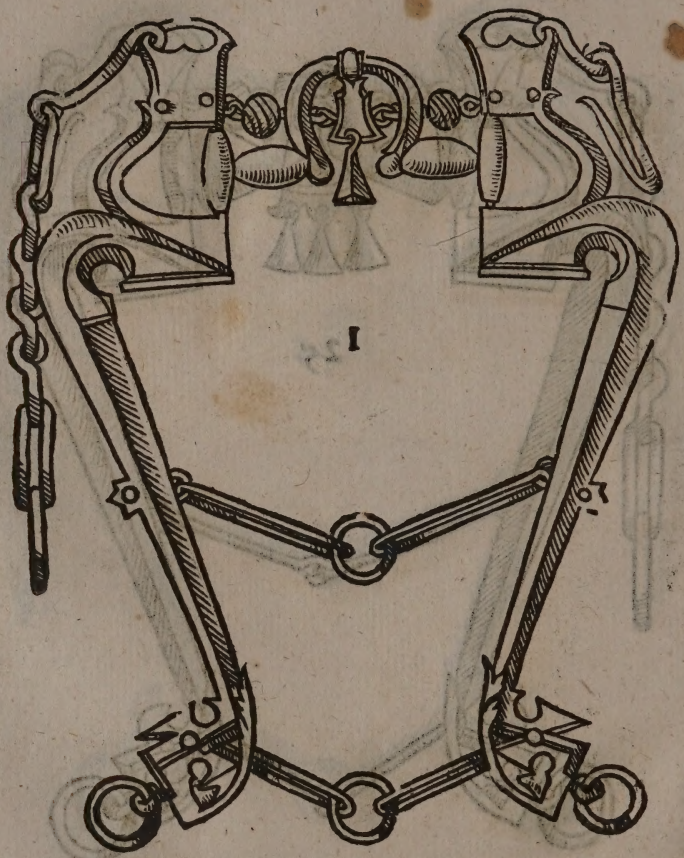
A halfe Cattes foote with peares.



## A halfe Cattes foote with Campanell.



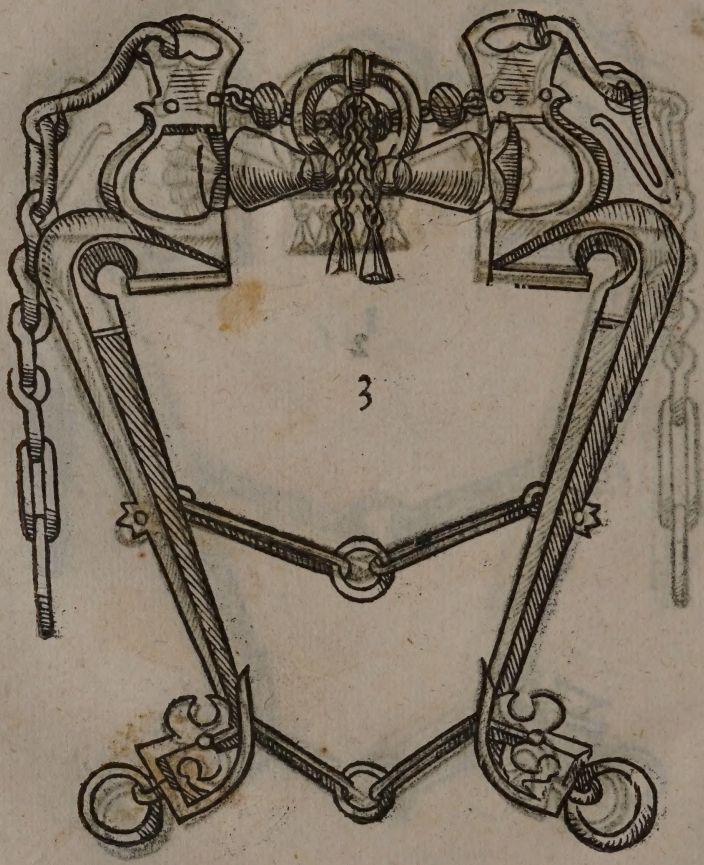
## A whole port with Olives.



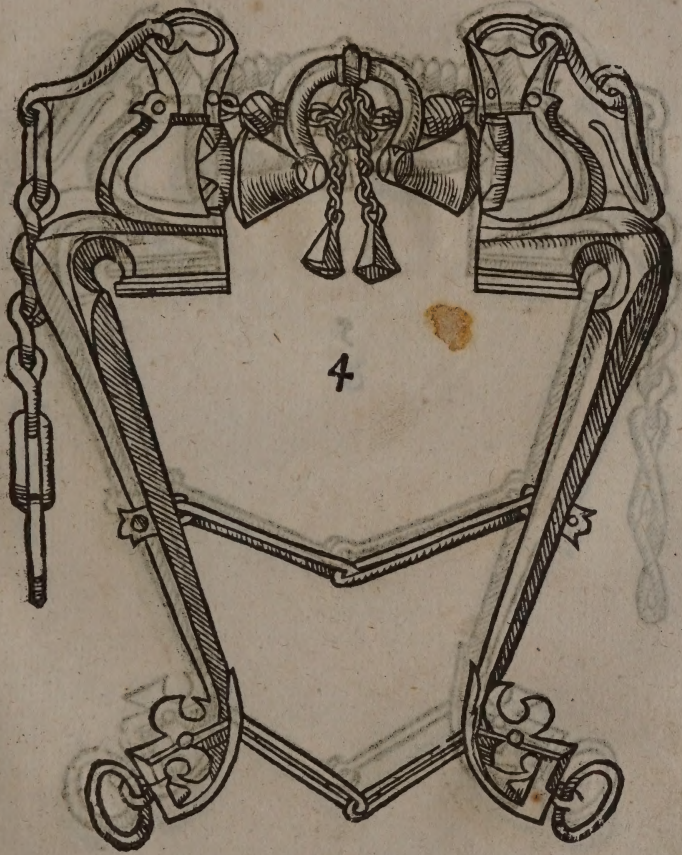
## A Scatch with a whole port.

2

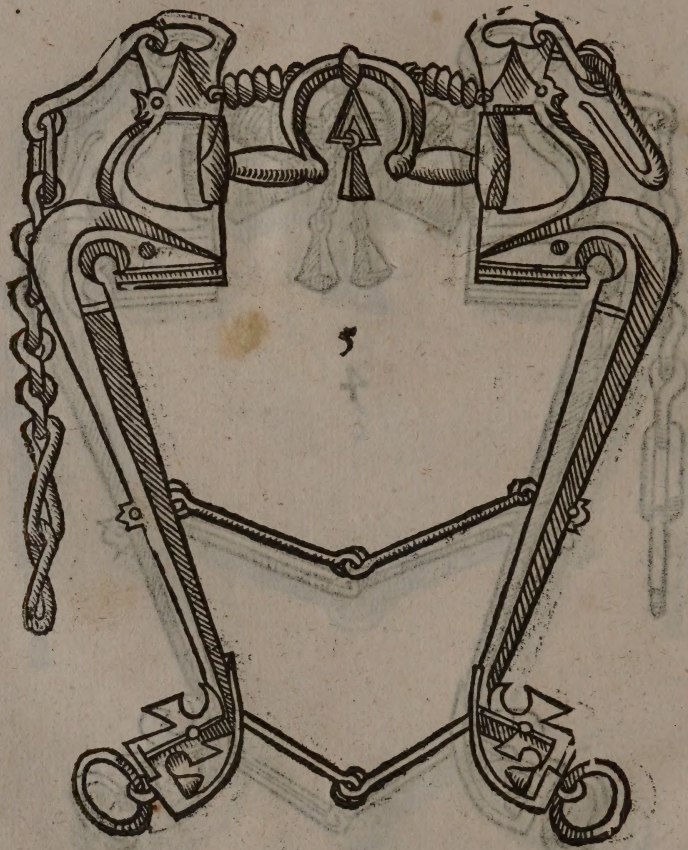
## A Whole port With Peares.



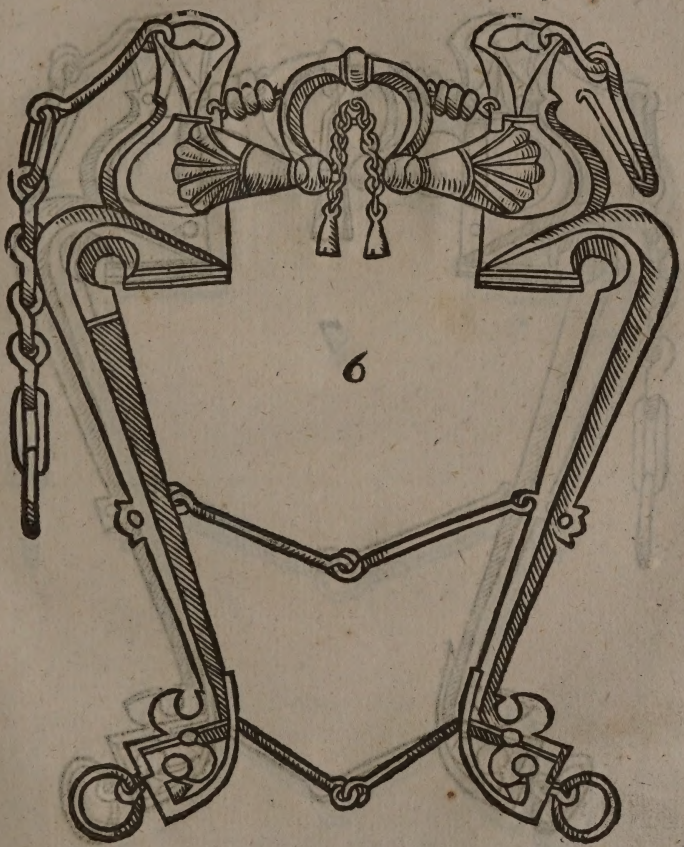
## A Whole port With Campanels.



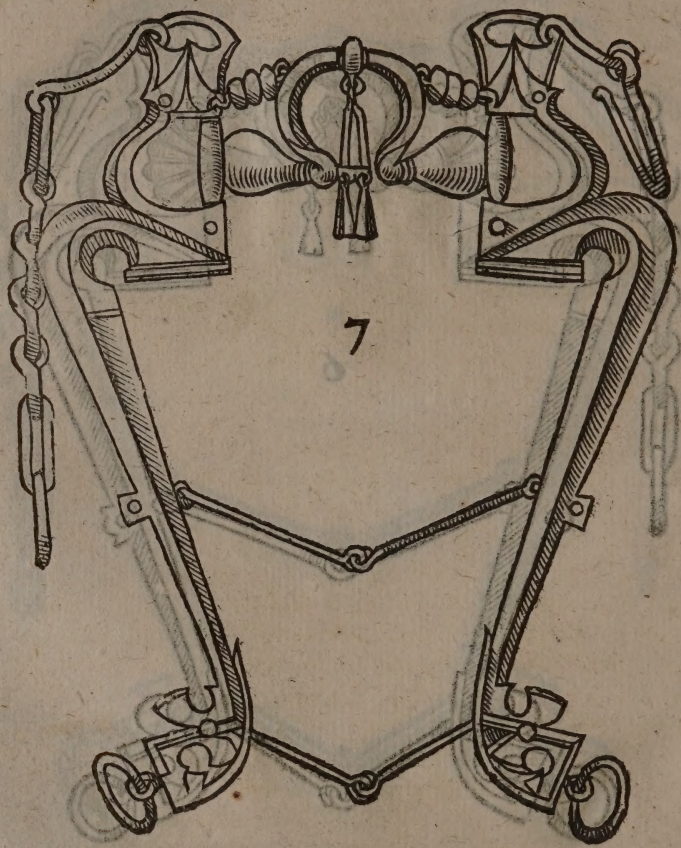
## A whole port with Olives having a trench aboue.



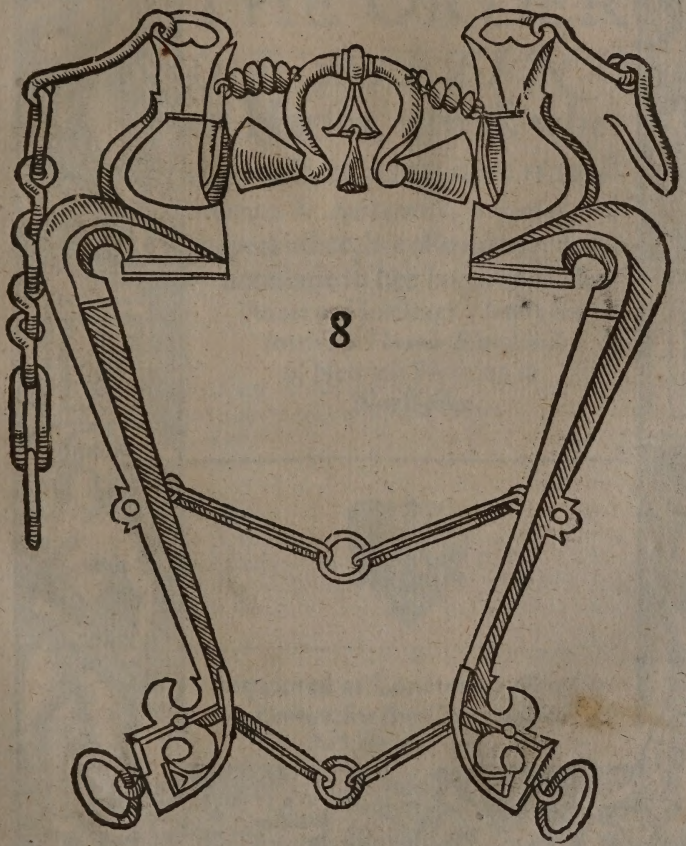
## A Scatch with a whole port hauing a trench aboue.



## A whole port with Peares hauing a trench aboue.



## A Whole port With Campanels hauing a trench aboue.



# THE ORDER OF DIETING of Horſes, aſwell whe they reſt, as when they trauell: *wherein is contained, not onely the* keepers office, but alſo many precepts neceſſarie to bee knowne of the Ferrer or Horſleach; lately ſet forth by *Thomas Blundeuill* of Newton Flotman in Norffolke.

Imprinted at London by *Humfrey Lownes*, for the Company of the Stationers. 1609.

# To the Right Honourable and his singular good Lord, the Lord Robert Dudley Earle of Leiceſter, Baron of Denbigh, Knight of the honorable order of the Garter, Maiſter of the Queens Maieſties horſes, and one of her Highneſſe priuy Councel, *Thomas Blundeuill* wiſheth perfect felicitie.

HAuing at length ended the order of dieting of horſes for preſeruation of their health, (wherein is wholly contained the keepers office) I boldly preſent the ſame here vnto your Honour, moſt humbly beſeeching you not onely to take it in good worth: but alſo to be a protector and defender of the ſame, againſt ſuch as raſhly perhappes ſhall iudge thereof. For I doubt not but that I ſhall ſeem to ſome at the firſt bluſh to be more exquiſit than needeth, & to haue giuē too curious a ſhape vnto ſo groſſe a matter, vſing therein too much Philoſophy for plaine mens vnderſtanding. Notwithſtanding, if it ſhall pleaſe them to conſider, that I write this Booke firſt vnto your Honour, (who delighteth in all good learning and vertuous exerciſes) then to the other learned Gentlemen of this Realme, and finally to ſuch keepers and Ferrers as are of capacitie to conceiue reaſon, and not to the ignorant ſort, which haue neither letters, iudgement, nor good vnderſtanding: and alſo that I cannot vſe leſſe Philoſophy than I do, vnleſſe I ſhall breake that order which I haue thought moſt meete to be obſerued in this Booke: then I truſt they will reſt ſatisfied, and thinke me not to be curious inough, rather than otherwiſe. For truely my chiefe intent is to inſtruct the Gentleman, ſo as he may be able to iudge both of the keeper, and of the Ferrer, and to teach them their office (if need be) rather thā he to be taught of them. And therefore if this my trauell may pleaſe your Honour, and all other Gentlemen, I haue my deſire, eſteeming alwayes more the due praiſe of one *Plato*, than the fooliſh wondering of the vnlearned multitude. Thus committing both my ſelfe, and my Booke, to your good iudgement and correction, I leaue to trouble your Honour with any further talke: praying God long to preſerue the ſame in healthfull life and proſperous ſtate.

Moſt bound to ſerue your Honour in all that hee can,

*Thomas Blundeuill.*

# A Short Preface declaring the order of this Booke.

MInding here to treat of ỹ kéepers office, shewing how a horse should be vsed, kept, and dieted, so as he may cõtinue long in health, & not fal by disorder into diseases, I think it good to vse such kind of talk, as not only ỹ kéeper, but also the Ferrer, or horse leach may learn therby in what points their knowledge chéefly consisteth, & with what order or iudgement they ought to procéed, whiles they séek either to preserue a horse from diseases, or else to cure him when he is fallen into them. Neither let any man marueil here, that I ioine the kéeper and the Ferrer togither. For sith there bee two ends of physicke, the one to preserue a healthful body from sicknesse, and the other to restore a sicke body to health: (whereof the first end is common aswel to the kéeper as to the Ferrer) it is requisite therefore, that the kéeper bee in manner as skilfull as the Ferrer, and specially in dieting him, and in knowing whẽ hee is disposed to sicknes, though not altogether so cũning in iudging the diuersitie of diseases, or in curing the same. But neither of them both (in my iudgement) shal be able to do their office truly vnles he giue himself to vnderstand ỹ nature, qualitie and disposition of a horse, and to know whereof he is compounded, and all the parts and members of him together with ỹ vse of the same, & also how to diet him aswel whẽ he is sick, as when he is whole. Wherefore for their better instruction, it shal not gréeue mee, in treating of this matter, to follow ỹ self same order that the learned Physicians do obserue in treating of mans body, to the intent it may haue some likenes of an Art or Science: & the rather for that the horse is so noble a beast, so necessarie and seruiceable to man, and partly to giue occasion to such Ferrers as haue som knowledge already to séeke for more, wherin I will vse so much plainnesse and briefnes as I can possible. To know then the nature of a Horse, and how to diet him, mée thinkes it is verie méete and necessarie, first to consider the things naturall where-

of

of he is compounded: secondly the things not naturall, whereby he is nourished, & his healthy maintained: and thirdly, the things vnnaturall, or against nature, whereby his health and nature both is decayed. Notwithstanding in this book I mind onely to treat of the things naturall, and not natural, (with what order, the chapters hereafter following do declare) sparing to speak of things against nature (which be the diseases) together with the diet and cure belonging thereunto, vntill I come to talke of the Ferrers office, which God willing, shall be in the next booke following.

## The Contents of the Chapters of this Booke.


Of the things naturall whereof a horse is compounded, how many there be, which they bee, and why they are so called. Chap. 1

Of the foure Elements, and what vertues and operations they haue. chap. 2

Of temperaments, how many there be, which they bee, as well simple as compound, and of what temperature a horse is, also of the qualities both first and second. chap. 3

Of humors, to what end they serue, and how to know ỹ diuers complections of horses, and which be best. chap. 4

Of the members of a horse, as well semblable, as instrumental. chap. 5

Of the number and qualitie of the sinewes of a horse. chap. 6

Of the veines of a horse, and how many they be. chap. 7

Of the number and situation of bones in a horses body. chap. 8

What proportion and measure is required in euery member of a wel shapen horse, according to Vegetius description chap. 9

Of the three powers or vertues, whereby as well the body of a horse, as of euerie other beast is gouerned. chap. 10

Of the spirits both animall, vitall, and natural of a horse wher-


to

wherto they serue, and in what part of his body they do chiefly remaine. chap 11
Of the things not natural, wherby a horses health is preserued, how many there be, which they be, and why they are so called chap. 12
In what aire is best for a horse to liue, and how his stable ought to be situated, made, kept, and vsed. chap. 13
Of the horses meat and drinke, and of the diuers kindes thereof and how he should be dieted when he resteth. chap. 14
What water is good for a horse to drinke, and whether it be good to wash a horse or not. chap. 15
Of the diuers kindes of mooning and rest belonging to a horse: wherin is declared how, where, and when a horse should be curried, kembd, and trimmed, also how his keeper should approch vnto him, & whether it be good to curtail horses or not. chap. 16
Of exercise both moderate and vnmoderate, and of the effectes thereof. chap. 17
How a horse should be prepared against he be tournied, and how to make him to receiue the bridle, & also how the keeper should lead him when he doth bring him forth, and finally how hee should be vsed and dieted whilest he is tournied. chap. 18
Of the sleepe and watch of a horse, and how he should be littered. chap. 19
Of repletion & emptines, & of the diuers kinds thereof. chap. 20
How and when a horse should be let blood, and to what end, and by what signes a man may knowe whether it is requisite to let him blood or not. chap. 21
How and when a horse should be scowred with grasse or otherwise and also what meat will soonest fat him. chap. 22
Of the affections of a horse, and how the keeper ought to behaue himselfe, that there may be a mutuall loue betwixt the horse and him. chap. 23

FINIS.

# Of the things naturall, how many there be, which they be, and why they are so called. Chap. 1.

THe naturall things, whereof not only a horse but also all other beastes, as well reasonable as unreasonable, are made & compounded, are in number seaue. And they be these; Elements, temperamēts, humors, members, powers, or vertues, actions or operations and spirits: which be called things natural, because the naturall perfection of the bodie of euerie sensible beast, wholly dependeth vpon these things.

## *Of the foure Elements, and what vertues and operations they haue. Chap. 2.*

AND first, as touching the Elements, you shall vnderstand, that this word Element heere, is as much to say, as a first beginning, being of it selfe most pure and simple, whereof all things are made: and againe, all thinges are resolued into ỹ same, and it is so pure & simple a thing indeed as by our outward senses it cannot be discerned. Som again do briefly thus define it, saying that an Elemēt is the least part, or smallest portion of that thing, which is made thereof. Of Elements, that be common beginnings of all things, there are but foure, that is, fire, aire, water, and earth. I meane not that fire, aire, water, and earth, which we dayly see here beneath with our eies, (for they are bodies compounded like our selues) other wise we could not see them: but those Elementes aboue, which our outward senses are not able to discerne, wherof the fire is highest, and therewith lightest, being placed next the Moone. And though this Element is both hot and drie, yet naturally it exceedeth most in heate. And the vertue and propertie thereof by meanes of his heate, is to moue matter to generation, and in mixt bodies to separate things of diuers kinds) called of ỹ Philosophers

losophers Heterogenia) one from the other, & to ioyne things of like kind (called Homogenia) together. For by vertue of ỹ fire, the bones either in man or beast be seuered from the flesh, and ỹ flesh from the sinewes, & the hart from the liuer, &c. So likewise the diuers parts of the wood which is burnt in ỹ fire, by meanes of the heat thereof are seuered one from another, as the vapour, the smoake, the flame, and the ashes. The like experience is also seene in tryng or purifying of mixt metalles. For the fire by meanes of his heat, doth seuer euerie sundrie metall by himself, and gather the like together. Moreouer, the vertue of the fire is to ripen, and to digest things raw and vndigested, to mingle the drie with the moist, to open the pores, that the aire being somewhat grosser, may enter into the bodie, and finally to breake the cold of the water and earth, so as it may not distemper ỹ bodie. The aire is placed next the fire, & is light & hot, but most chefely moist. The vertue of this Element, by meanes of his moistnesse, is to make the matter apt to receiue shape, either natural or accidental, & also together with the fire, to bring the powers & influences of the heauens and stars into the inferiour bodies, & to make the mixt bodies not onely subtile and penetrable, but also light, to the intent they may be neither to grosse, nor to heauie. Againe, the ayre with his moistnes doth slake the burning heat of the hart, and of the other members, as is well seene by the office of the lungs, which like a paire of bellowes doth continually draw fresh aire vnto the heart. And though the aire seemeth to our outward senses not to be so moist as the water, yet indeed, according to the Philosophers opinion, it is far moister: which is well proued (say they) in that it is so flexible, and spreadeth so farre abroad, filling all emptie corners; which be the special properties of moistnesse. And therefore it is much harder to be kept within his owne bounds, chã the water is. Notwithstãding, some hold opinion, that as the water was altered by God from his first natural place, to the better behoofe of man & beast: euen so the aire was not altogether left in his first natural disposition: for then it should be so moist, as man nor beast were able to breath or liue. Next vnto the aire is the Element of water, which is heauy and moiste, but most colde. The vertue of

this

chis Element is by meanes of her coldnesse in mixt bodies, to cõglutinate or ioine together parts or members that be of diuerse kinds, as bones with flesh and sinewes, and flesh againe with sinewes and bones: so likewise in time of frost, you see the cold doth bind together things of diuers kinds, and bring them al into one masse, as dirt, stones, sticks, strawes, and such like. The water also with her coldnes doth temper the feruent heat of the fire, & doth gather together those things which the fire would disperse asunder. Next vnto the water is ỹ earth, which is most heauie & cold, but most chiefly drie, the vertue therof is in mixt bodies, so to harden them as they may retain their shapes, which otherwise by meanes of the aire and water, would be florible & not abide: as is easie to see in a peece of war, newly wrought & sealed with some print, which before it be hard & drie will not hold. And note, that according to Hippocrates opinion, when any liuing & sensible bodie dieth, not onely each qualitie, but euery substance, & part therof returneth to the Element frõ whence it came. That is to say, that which is hot, to the fire: that which is moist, to the aire: that which is cold, to the water: and that which is drie, to ỹ earth. Thus much of the foure Elements, which be the common beginnings of all things, as well liuing as vnliuing, sensible as vnsensible. For of things liuing and sensible, hauing blood, there be other higher Elements or beginnings, which be called ỹ proper Elements of generation, that is to say, the ingendering seed and menstrual blood, frõ whence euery beast taketh his first being or shape. And yet these proper beginnings depend vpon the qualities of the first common beginnings before rehearsed, that is, of moist, drie, hot, and cold, without the which they could do nothing, nor yet be any thing themselues.

## Of Temperaments, how many there be, which they bee, aswell simple as compound, and of what temperature a horse is, also the qualities both first and second. Chap. 3.

OF the commixtion of the foure Elementes aboue rehearsed do spring nine temperaments, whereof eight be called vnequall, & the ninth equal. Of the eight vnequal, foure be called simple, and foure compound: ỹ foure

foure simplie be these, hot, cold, moist, and dry, which of the Philosophers and Phisitians bee otherwise called the first qualities, wher of the first two be active, & the other two passiue. The foure compoundes bee these, hotte, and moyst, hotte and dry, cold and moyst, cold and drie. Againe, ẏ equall temperament is diuided into two, that is to say, into that which is vniuersal or generall, & into that which is spectall. The equall temperament vniuersal is, when there is an equal proportion of the foure elementes, that is to say, not more of one thã of another appertaining to nature vniuersal. The equal temperament especial is, when the Elements are proportioned according as every kind doth most properlie require, bee it plant or beast. As for example, we say that Wormwood hath his due temperament, when it hath such qualities as Wormwood should haue, which is, to haue such cõmixtion of the Elements, as in his operation it may bee hot, dry, and astringent. The like is to be said of the dog, swine, horse, or any other beast, whereof euery one is saide to haue his due temperament, when he hath such temperament, as is most proper vnto his kind, which is best known by his doings. As for example, the horse is knowne to be hot and moist, by his lightnesse, swiftnes, boldnes, & long life, and also to be of a temperate nature, in that he is tameable, docible, & wil be obedient vnto man. And so long as a horse, or any other thing continueth in the mediocritie or meane of his proper temperament, we say commonly that he is of a good temperature: but if he exceed in any qualitie more than he should do, as in heat, coldnesse, moistnesse or drithe, then we saie that he is either hot or cold, dry or moist, according to that qualitie wherein he excedeth. Againe, euery kind hath his due temperament according to his age, and countrey wherin he is bred: and also according to the time of the yeare, as for example. A horse in his fole age, is naturally hot & moist, in his middle age more hot and dry than moist, and in his old age more cold & drie than either hot or moist. Likewise the Horses that bee bred in Greece, Afrike, and Spaine, be naturally farre hotter than those that be bred here in England, or such like cold coũtryes. Neither is any horse being in health, so hot in Spring time, which is the most temperate part of the yere, as in Summer: nor yet so cold

in ſummer, as in winter, all which things are to be conſidered, aſwel of ỹ kæper, which hath to tend them, and to diet them being whole, as alſo of the Ferrer or Horſeleach, which goeth about to cure them when they be ſicke. For vnleſſe he conſider their natures and temperatures, together with theſe circumſtances, he may quickly be deceiued in his miniſtration: & therfore I would wiſh him to haue a good reſpect vnto the kinde, age, country, and time of the yære, to ỹ intent he may apply his medicines, accordingly. It is neceſſary alſo to cõſider the ſecond qualities, ſo called becauſe they take their beginning of the firſt qualities before mentioned, of which ſecond qualities ſome be called tangible or touchable: as theſe, ſoftneſſe, hardneſſe, ſmoothneſſe, roughneſſe, toughneſſe, brickleneſs, lightneſs, heauineſſe, thinneſſe thickneſs, ſmalneſs, groſeneſs, and ſuch like. Some againe be not tangible, as thoſe that appertain to hearing, ſeeing, & ſmelling, as noiſes, colors, odors, and ſuch like. For by obſeruing wel theſe ſecond qualities he ſhal quickly know whether the horſe be diſpoſed to any ſickneſſes or not.

## Of humors to what end they ſerue; and how to know the diuers complexions of horſes, and which be beſt. Chap. 4.

THe Humors wherof not onely a horſe, but all other beaſts are made, be in number foure: that is to ſay, Bloud, Fleam, Choler, & Melancholy. The bloud of his own nature being vncorrupted is hot & moiſt, & ſweet to ỹ taſte. Fleam is cold & moiſt & alſo ſweet, or at ỹ leaſt without any taſte like vnto pure water. Choler is hot & dry, & bitter to ỹ taſte. Melancholy is cold & drie, and therwith ſower and heauy, and by means of theſe qualities the foure humors be anſwerable vnto the foure Elements. For the bloud in nature is like vnto the aire, fleame vnto water, choler vnto fire, and Melancholie vnto the earth. And though theſe foure humors be mixt throughout all the parts of the body: yet euery one aboundeth in one part more than in another, and haue their peculiar reſting places, accordingly. For bloud chiefly diwelleth about the hart, fleame in ỹ braine, Choler in ỹ liuer, and Melancholy in the ſpleene.

Moreouer, as euery one of theſe humors hath more or leſſe ſo-

vereignty in any beast, so is the beast naturally the better or worse coloured, qualified, or disposed. As for an example. That horse in whom blood doth most reign, is bate of colour, and therwith pleasant, nimble, and of a temperate moving. But if fleam haue the chiefe dominion in him, then is hee most commonly a milke white, and therewith slow, dull and heauy. Again if choler be chiefe, then he is of colour most commonly a bright sorrell, & therwith very hot and fiery, and oftome of any great strength. And if the earth hath souereigntie, then he is black of colour, or a mouse dun, & therewith fearefull, faint hearted, dull and heauy. Againe, euery humour hath his proper vse or end, wherto it serueth. For blood serueth chiefly to nourish the body, fleame to help the moving of the ioints, choler to prouoke the belly to auoyd excrements, & Melăcholy to prouoke appetite. And so long as these humors kéep their natural qualities, they are wholesom and be called by their simple names without any addition: but if they chance by some misorder to be altered or corrupted, then they be vnwholsome, and are no longer called by their simple names, but haue some addition thereunto: as Cholerick, Flegmatik, or melancholy blood, Salt fleam, Choler adust, or burnt Choler, and fretting Melancholy, whereof procéede many grieuous diseases and sicknesses, as we shal declare hereafter.

## Of the members of a horse, aswel semblable, as instrumental. Chap. 5.

OF members, some be called of the Physicians Similaria, that is to say, like, or semblable; and some instrumentall. The members semblable be those, which beeing diuided into partes, all the partes thereof bee like in substance to the whole, and haue like definition, and do beare the same name: as flesh, bone, sinew, & such like. For the flesh of a beast being diuided into sundry parts, euery such part is flesh, and called flesh, aswel as the whole, the like may be said of bone, sinnewe, or any other member semblable, of what kinde soeuer it bee. Members instrumentall be those, which being made of parts semblable, and diuided into parts, the parts be not like, nor haue not all one name with the whole: as the head, hand and foote, or such like: for euerie part of the head, is not called a head:

nor euery part of the hand a hand: and these members instrumental, are of more perfection than the members semblable, in doing their office. Of which instrumental members there bee foure chiefe or principal, that is to say, the braine, the heart, the liuer, & the stones, wherof ỳ first three are only to preserue that singular bodie wherin they be: the fourth is to preserue ỳ whole kinde. Againe, from these members do spring other members, which do serue them: as the sinewes from the braine, the artires from the heart, ỳ veines from the liuer, and ỳ seed vessels from the stones: all which parts and members together with the rest that be in a horses body, I wish that our Ferrers and Horseleaches wold be diligent in searching to know them by cutting vp of dead horses, to the intent they may be the more perfect in discerning one thing from another, when they come to deale with the parts of a liuing horse: for lacke of which knowledge, I haue knowne some in my daies to haue cut principal sinewes asunder in steed of veines. Wherefore I doe meane, God willing, hereafter if I shal haue leisure and time, to set out a perfect Anatomy or description of a horse, declaring al the chiefest parts, and how they hang together, & are deriued one of another, together with the vse of the said parts, and also what diseases doe most commonly breed in the same. And in the meane time I shall desire you to content your selfe with a briefe description only of ỳ sinewes, veines, and bones, gathered out of a learned Authour, called Vegetius, whose words do heere followe.

## Of the number & qualitie of the sinewes of a horse. Chap. 6.

IT behoueth vs also to describe to you ỳ nũber, quality & measure of ỳ sinews of a horse. Frõ ỳ mid nostrils vp to ỳ top of ỳ head, & so down along ỳ back euen to ỳ croper, comes 2. great cords or tendõs, euery one 12. foot long. Then is there two brãches & principal sinews of ỳ brain, containing 4. foot. Then from the shoulders to the nert ioint downward 2. great sinews or tendõs. And frõ ỳ ioint down to ỳ pasterns 4. great sinews. Also in ỳ fore part & about his brest, aswel within as without, are x. sinews & as many in his hinder parts. Then from the reins of his back vnto

vnto his stones are foure, so that in his whole body he hath in al foure and thirtie apparant sinewes.

## Of the veines of a Horse, and how many they be. Chap. 7.

IT is necessary also for you to know ye veines of a horse, & specially those wherin a horse should be let blood in time of nede, & therfore I will recite vnto you al ye inward veins proceeding frō ye liuer, which is ye spring & fountain of blood in al beasts. You shal vnderstand then, that within ye palat of the horses mouth bee two notable veins, which are cōmonly wont to be touched or striken when ye horse hath any disease in his head or brain. There be also two apparant veines vnder his eies, & other two vnder his fore shoulders, he hath also two maruellous great ones in his breast which are wont to be stricken when ye horse hath any kind of feuer, or is sicke at the hart, or in his lungs. There bee also foure veines in his thighes, called of Vegetius Subsarrhes, & two in his pasterns, which are wont to be striken, when ye horse is wearied or tired, or otherwise soiled on his feet. There be also two ye come down to his hoones. Moreouer he hath four in his flanks, and two in his hams, or rather houghes, and two in his hinder legs: but vnder his tail, he hath no more but one that is apparāt. A horse hath all these veins before rehearsed, besides the necke veines that go towards the withers, which be ye common veins of letting blood. The summe of al the veins mēt to be stricken, amounteth to the number of nine and twenty.

## Of the number and situation of bones that be in a horses body. Chap. 8.

EVerie Horse or Mre hath in the vpper part of his heade two bones, and from his forehead vnto his nostrils, other two: also two nether iaw bones, and of teeth in all, to the number of xl that is to say, of iawe teeth, or side teeth, xxiiii. of tushes 4. of foreteeth, otherwise called the shearing teeth xii. The ioint bones, as wel of the necke as of the backe, be in all xxii. that is to say, from the head to the withers viii. & from thence to the reines or kidnies viii. and from thence to the taile, seauen, then is there the great broad hinder bone, called the sacred bone,

which hath 12. seames or ioyntures. Also in ỹ horses shoulder bee two great bones, called the spade bones, and from thence to the forcels or Canel bones, other two bones, and from thence to the first ioint aboue the legs, other two, and from thence to ỹ knées two called the thighe bones, & from thence to ỹ pasternes, other two called the shanke bones, and from thence downward to the hoones, be in all sixténe little bones. Then there is a great bone in his breast, whereunto are fastened. xxvi. ribbes. And to the Columell behind be two bones, & from the molares to ỹ ioints other two, and also two towardes the ribs. From ỹ bending of the hough vnto the leg, are two small bones, and from ỹ leg to the two forcels of the leg, other two litle bones, & from the pasternes to the hoofe sixtéen litle bones. The summe of all the bones, is a CIXX.

What proportion and measure is required in euery member of a wel shapen horse, according to *Vegetius* description. Chap. 9.

IN the palate of his mouth be twelue degrees or steppes, standing one aboue another, like a paire of staires. His tongue would bee halfe a foote long, his vpper lippe fiue inches, and his nether lippe fiue inches long, euerie iawe tenne inches long, his head from the middle of his forehead vnto his nostrels, would be a good fote of the standard, his eares in mine opinion (for Vegetius appointeth no certain measure vnto thē) according to his owne proportion already begunne, would bee about fiue inches long: for fiue inches, as he saith, is ỹ iust length of an Ore his eare. The circuite or compasse of his eie would be foure inches about, his necke from the nape of his head vnto his withers, would be seuen Calculs. From thence to the reines two and twentie, and from thence to his tail twelue. The legth of his thigh before, would be twelue inches, and the length of his shanke fiue inches, and his thigh behinde requireth to be a foote long, and the shanke to be fiue inches long, and the length of his whole body from head to taile would containe fiue féete.

Of

Of the three powers or vertues, whereby as wel the body of a horse as of euery other beast is gouerned. Chap. x.

The powers & vertues, whereby the bodie of euery beast is gouerned, are in number three, that is to say, the power Animal, the power Vital, and the power Naturall. The power Animall, is a vertue incident to the braine, which through the sinnewes comming like conduite pipes from the braine, distributeth feeling and mouing to all the partes of the body. The power Vitall, is a vertue belonging to the hart, which giueth life and spirit to al the body, & to euery part therof, by means of ỹ arttires, which also like conduit pipes doe proceed from the heart the cheife fountain of naturall heat. The power Natural, is a vertue properlie appertaining to the liuer, which giueth nutriment vnto al the body, & to euery part therof, by meanes of the veines, which likewise proceede from the liuer like conduite pipes carying the blood from the liuer, which is the fountaine of blod vnto euery part of the body. Moreouer, the power naturall comprehendeth foure other vertues, that is to say, ỹ vertue attractiue, whereby it draweth sustenance mèt to nourish the body, than the vertue retentiue, whereby it retaineth and kèpeth the sustenance receiued: thirdly, ỹ vertue digestiue, whereby it digesteth the same: and finally the vertue expulsiue, wherby it expelleth excrements, or superfluities. Thus you sée that the three powers before recited, bee of no smal importance, and therefore the Ferrer had nèd to haue a special regard vnto them: for if any of them faile, the beast cannot liue.

Of the actions and operations that belong to the vertues before recited. Chap. xi.

From the three powers before rehearsed, doe procéde diuers actions or operations: for the action and operation of the power Animal, is to discerne, to moue and to féele. We discerne by meanes of the vertue Imaginatiue, Discoursatiue, and Memoratiue, whereof the first is placed in the forhead, the second in the middle of the braine, and the third in the hinder part of the head: al which are comprehended vnder ỹ power Animal before described. We moue, and haue our mouing by meanes of the vertue motiue, whose action and operation is to

straine, or to let slack the sinewes, wherof al the members haue their moning. Again, our feeling is by meanes of the vertue sensitiue, whose action is occupied in the 5. senses, as to see, to heare, to smel, to taste, and to feele or touch: and all these actions do proceede from the power Animal. The action or operation of the power vitall, is to restraine & to loosen the heart, and the arteres proceeding from the heart, which action, whether it be hurt or disturbed in mans body or not, is easilie knowne by the vnequal beating of the pulse, that is to say, of the arteres, which commeth from his heart, downe vnto both his wrestes, & I thinke to a diligent Ferrer, are easie inough to bee found in the forelegs of a Horse, or at the least in the temples of his head.

For as his skinne is much thicker than a mans skin, so be his arteres also greater, & doe beat with greater violence, and therfore are the more easie to bee felt. The actions or operations of the power natural, are to ingender, to increase, to nourish, to desire with appetite, to attract or to draw, to alterate or to change, to digest, or to distribute, to retaine and to expell, & many such like. These actions therfore are to be considered of the Ferrer, to the intent that he may learne by them not onely the whole state of a horses body, but also what particular member or part thereof, is at any time euil affected or grieued. But now you shal vnderstand, that of actions, some be voluntary, & some not voluntarie. The voluntarie be those, which both man & beast may further and hinder, stay, or let, when they wil themselues; as the moning of the legs: for it is in their power to go, to stand, or to ly down when they wil themselues. The actions not voluntary, are those, that depend not vpon the wil of man or beast, but bee done of their owne accord, and naturally, as the moning of the heart, and of the arteres, which doe continually moue and beate, whether the beast sleepeth, or waketh. Thus much of actions.

## Of the spirits both animal, vital, and, natural of a horse, wherto they serue, and in what partes of his body they do chiefly remaine. Chap. xii.

A Spirit heere is to bee vnderstanded for that fine, pure, cleare, and airy substance, which is ingendered of the finest

part

part of the blond, to the intent that the vertue of euery principall member may resort vnto all the other partes of the body, so as they may doe their offices and actions accordingly, and therefore the selfe same comparison may bee made betwixt the blond and the spirit, that is, betwixt the fire and the spark. Of spirites, according to Galene, there be two kinds, that is to say, the spirit animal, and the spirit vitall. The spirit animall is that, which giueth power of feeling and moouing vnto the beast, in which two thinges the nature of the beasts chiefly consisteth. And therefore Aristotle doth define a beast in this wise, saying: *Animal est quod sētit, & mouetur.* A beast (saith he) is that which hath feeling and moouing. This spirit animal hath his chiefe resting place in the braine, from whence through ỹ sinewes it is dispersed into all other parts of the body. And it is ingendered of the vitall spirit, being more vehemently wrought and laboured, and partly of continual breathing: euen so it is partly preserued by the caule of the braine, which doth continually water it and nourish it. The spirits vitall is contayned in the heart, from whence it floweth into all ỹ partes of the body, being the chiefe cause of all the naturall heate in the body, and is preserued and nourished, partly by breathing, and partly by blond. To these two spirites, you may if you wil for order sake, adde the spirit naturall, which (as Galene saith) if there be any such, it is without doubt conteined in the liuer, and the veines. But the other two bee such principall thinges, as the body cannot liue without them, nor yet haue any being at all. And therefore it is necessary that the Ferrer haue a special regard vnto them, that they may bee alwaies preserued in their force and vertue. Thus hauing briefly talked of ỹ seauen naturall thinges, whereof a Horse or any other beast is made and compounded: now it resteth, that we speake of the thinges not naturall, whereby the healthfull state of any beast is preserued and maintayned, declaring therewith how such thinges ought to bee vsed accordingly.

Of

Of the things not natural, wherby a Horses health is preserued, how many there be, which they be, and why they are so called. Chap. xiii.

THe thinges not naturall, whereby the body either of man or beast is preserued, bee in number fiue, that is to say ỹ aire, meate and drinke, moouing and rest, sleepe and watch, emptinesse and fulnesse, and the affectes of the mind: which thinges are called not naturall, because that as they preserue the bodie being rightly applied: so againe, if they be otherwise vsed than wel, they destroy the body.

In what aire it is best for a horse to liue, and how his stable ought to be be situated, made, kept, & vsed. Chap. 14.

BVt forsomuch as a horse is a farre grosser beast than man, and made to serue man in all seasons and weathers, bee they hot, cold, dry, or moist: and also for that hee doth seldome surfet through the intemperature of the aire: vnlesse he hath bene chafed and driuen into some sweat before, or by some other accident: I meane therefore not to talke much of ỹ aire, but only to say, that sith al beastes liue by the aire, the more pure & clearer that the substance of the aire is, the more wholesome it is for the horse. And as for the qualitie of the aire, it may be wholsome or vnwholsome, according to the complexion of ỹ horse: for some require to liue in a hot aire, & some in a cold, and some in a mean: as those that be of a good temperature, to whom ỹ temperate aire is alwaies most wholsome. But when a horse doth exceede in any of the foure qualities, that is to say, in heate, moistnesse, coldnesse, or drithe: it is best for him to liue in that air which is contrary to that qualitie, wherein he exceedeth. And in diuerse diseases, the change of the aire is verie necessary and profitable, as wel to a horse or other beast, as to a man. But sith stoned horses, for the most part be kept in the house, and liue not abroad in the open aire: I wil shew you how a horses house or stable should be situated, made, kept & vsed. The stable then according to Palladius opinio (whether it be for Horses or Oxen) would be placed towardes the South, & yet so, as it may haue windowes also towards ỹ North: which as he saith, being close

shut

shut in winter season, cannot hurt them, and being opened in summer season, shal greatly refresh them. And a stable would bee placed on a drie ground, and nigh vnto a wel, or some other good watering place, and so as the owner may haue a delight to come alwaies thither to see his horses: for according to the olde Prouerbe, that horse is most commonly fat, which is fed with his maisters eie. And in any case let no swines cote be nigh vnto the stable: for the filthy sauour of swine, and of all thinges that come from them, is very pernicious and hurtful to horses. But now, as touching the making of ỹ stable, Vegetius would haue it to be very lightsome, least the horses being vsed to darknesse, when they come abroad, bee not able to abide the light of the Sunne, dazeling their eyes so, as they cannot perfectly see. But then the windowes would be glased or lattised, to ỹ intent that no fowles may enter in, whose feathers and dung be very dangerous, the one to the throte, and the other to the belly. And as touching the floorth or plancher, Columella, Palladius, and others, would haue it to be made of ỹ heart of hard oak, & not of smoth & soft wood. And the same plancher to stand somewhat slopewise or falling, to the intent that no water or Horsepisse may abide theron to hurt their houes. For the conueyance of which water or pisse, there would be made at the lower end next vnto ỹ tailes trée, a conuenient gutter, close couered with a plank or bord, in such sort, as the same being lifted vp, the gutter may bee often swept, and kept cleane: at the end of which gutter, the ground would be such, as it may drinke vp the water, or else it must be conueyed further into some backe dike or pit, méete for the purpose. Notwithstanding, in many partes of Italie, the floorthes of the stables be made with a round paning stone, and not with plankes, which no doubt is very good to harden their houes, but I think it were too cold a floorth to be vsed in this country. Notwithstanding, all the stables of S. Thomas Cheny, somtimes Lord Warden of the fiue Portes (as I vnderstand) were made with such pened floorths, who delighted not only to haue a number of good horses, but also to haue them wel kept, and vsed accordingly. The manger would also bee made of thicke oken planks, & close bored in the bottom, to the intent the prouender

may not fal through and be spilt. And because that al Horses vse not like spéede in their feeding, Vegetius would haue that euery Horse should haue a locker to eate his prouender in, peculiar to himselfe, which would be somwhat narrower in ẏ bottom, than at the brim, and no wider than one Horse may easilie put in his head at once, which kind of lockers are commonly vsed in Italy, and for the most part they be of marble, or such like hard stone, & are aptly placed and fastened within the manger, so as they cannot be moued: & in many places such kind of mangers do serue also in stead of rackes: for betwixt euery two prouender pots or lockers, ẏ bottom of ẏ manger is not close boarded, but latised with laths, being about an inch or more distant one frō another, so as ẏ dust that comes from the hay, which is cast therein, may fal downe to the ground. And to the intent that the horses may straine their neckes the more in stooping low for their meat, such racklike māgers according to Petrus Crescentius opiniō, ought to be placed low by the ground, euen before the horses knées. And though these kind of racks be of late daies left in most places: yet I sée no great cause why they should bee left, & specially in Noble mens stables. For first it is more naturall for a Horse to féed downward than vpward, according to the shape that nature hath giuē, aswel to him as to al other vnreasonable beasts, for man onely loketh vp to ẏ heauens: which is very aptly touched by Ouid in these three verses.

*Pronáque cum spectent animalia cætera terram,*
*Os homini sublime dedit cœlúmque videre*
*Iussit, & erectos ad sidera tollere vultus.*

Againe, he stretcheth ẏ reaning part of his neck, which hath most néed to be stretched, more by stooping downward, than by loking vpward, which is not only painful vnto the Horse, but also incommodious: for when the rack stándeth aboue head, it filleth the horses mane ful of dust: and besides that, if there should be any feather, Hens dung, or such like euil thing in the hay, it would soner fal into his throat, than when he taketh his meate from beneath. Notwithstanding most men now adayes doe vse the high standing rackes for two causes: first, for that the horses cannot blow vpon the hay so much as if it lay beneath: secondlie,

lie: for that they shal not destroy so much hay, lying aboue head, as when it lieth beneath. And som man perhaps would adde the third cause, saying: that a horse laboureth more in pulling out his meat from aboue than from beneath: but sith that such labor exerciseth the téeth more than any other part of the bodie, it is not therefore so material. And as for the other two discommodities before alledged, are soone remedied in noble mens stables, where the groomes of the stable do nothing else but tend vpon ỹ Horses, to serue them of meat by litle at once, according as they shal sée it néedful, so shal they haue it fresh and fresh, which shall do them more good, than that which lieth long before them. And therfore in great mens stables, where seruants doe nothing else but serue horses, I would wish the manger to be made racklike and to stand as before is said. And in mean mens stables, where seruants cannot be suffred to giue continual attendance on their Horses, the rackes may be placed aboue head, as they be euerie where at this present, but therwith of such height, as is most agréeable to the horses stature that shal stand thereat, that is to say, neither so lowe as may touch their eies or head, nor yet so high as it shal paine them to reach vnto it. And to the intent that euerie horse may stand and lie seuerally by himselfe, it is méete that the stable floorth or plancher bee diuided into conuenient roomes, with the postes set vp, and mortised into ỹ tail trée: vnto euerie which post, and vnto ỹ manger, would be fastened a cõuenient barre of timber, with a cord or thong of leather, in such sort as the bar may sway euery way: so shal it saue the horses from striking one another, without doing them any hurt: and they that list to bestow more cost, may double boord euery partition betwixt roome and roome, if they wil, and make the partitions so high, that the horses shal be neither able to bite, nor strike one another, no nor yet to sée one another: but such cost is not greatly commodious, vnlesse they might carrie their stables alwaies with them. And vpon the backeside of euerie such post or partition, would be set a pin of wood, to hang thereon euery horses bridle seuerally by it selfe, and on the inside of euerie post, there would be two péeces of whipcord, of a conuenient length, fast wedged in at such length as may serue to stay ech cheek of ỹ bit,

bit, whiles the horse standeth with his taile toward the manger, champing on the bridle to get him a stomach, whereof we shall speak hereafter in his proper place. Moreouer, ther wold be set in places conuenient, pinnes, hookes, and shelues meet to hang or lay vp such instruments, as are to be occupied in ỹ stable, about the carrying, fretting, or trimming ỹ horses, or otherwise. Also nigh vnto the stable would be the horsekeepers chamber, in the which, or else in som other close rome, cut out of ỹ stable of purpose, wold be placed tubs or hutches, meet to receiue ỹ prouender. And also close presses for the saddles, harnesses, guirts, stirrops, or bits, to be kept cleane from dust and moulding: and finally, to auoyd all danger of fire & candle, I would wish al stables to be vaulted, as they be in Italy: if not ỹ the plates wherein the candles should stand, be strong & broad ioted, meet to receiue al sparks or droppings and therewith to be placed where they may giue most light, with lesse danger. Thus much touching ỹ situating & building of the stable: now let vs shew you, how the same should be vsed and kept. Vegetius saith that stables in winter season, wold rather be kept lukewarm, thē very hot. For although, saith he, that aboundāce of heat causeth the horses to bee fat, & ful, yet it maketh rawe digestion, & greatly hurteth nature, because that many kinds of diseases are ingēdred in the beast, of the very vapour that riseth out of the stable: and being vsed to such warmth within doores, when they come abroad, they easilie surfet of euery little cold. And in any case, Xenephon would haue the stable to be kept cleane & neat, aswel when ỹ horses are present, as absent, which (as he saith) doth not only please ỹ eie, & commend the diligence of the keepers, but also preserueth & increaseth the health of ỹ horses, by means that the filthy and stinking sauours be remoued from thēce, wherby not only the horses breath, but also the aire it selfe is infected and corrupted, wherof may spring a further mischiefe. Moreouer, ỹ same Xenophon would haue all instrumentes belonging to the stable, to be placed orderly euery one in his proper place, that they may be ready to find, & so as they may touch no food, wherof ỹ horses haue to eat, nor that ỹ horses themselues may reach them, to bite or gnaw on them, as some wanton horses will, for

that

that is not wholsome: and therfore I cannot praise such kepers, as vse most commonly to hang their currying combe in ỹ rack amongst the horses meate, and in his sight and smell, or to leaue their dusting cloth in ỹ manger. Xenephon also would haue no keeper in the night season to bring any candle into ỹ stable without a lantern, willing him to be careful therof, for hay & strawe will sone take fire. Also that he kep the stable doze alwaies shut for two principal causes: ỹ one is, to the intent that the horse be not beguiled of his meat: and ỹ other is, that he may know whether ỹ horse do eat or spoile that meat which is giuen him or not. For as Xenephon saith, there be two principal signes to know a horses health, the one within the stable, & that is, when the horse eateth his meat gredily, and with a good appetite: the other abroade, and that is, by the moistnesse and white foaming of his mouth.

## Of the horses meat and drinke, and of the diuers kinds therof, and how he should be dieted when he resteth. Chap. 14.

THe second thing not natural, wherby ỹ body of the horse is preserued & nourished, is his meat & drink: touching ỹ which many things are to be cõsidered, as ỹ kinds & substãces of meat, & which be best: ỹ quantity, ỹ quality therof, & ỹ delight & custome of ỹ horse, the order and time of ỹ day in giuing him his meate, also the time of the yeare, and the horses age. The most naturall kinds of meats, wherewith Horses ought to be fedde, according to Rusius, are these: grasse, haie, straw, barly, and Oates: some adde therunto wheat, and fitches, and also blended corne. Grasse is very nourishing, but therewith too moyst to be giuen vnto horses of seruice, vnlesse it be when they haue nede to bee scoured or be fallen into some sicknesse: sweet haie also is a great nourisher, and dilateth the body. But if a horse be cõtinually fed therwith, it wil make him side bellied, foggy, pursie, and heauy in his labour: strawe is a drier kind of fode, and though it nourisheth not so much as hay, yet it breedeth firme flesh, and maketh the horse long breathed, hard, and strong. For which cause,

they

they vse in most places beyõd ỹ Seas, to feed their horses cheifly with sheaues of wheat straw vnthreshed, the eares onely cut off, which our Calice mẽ also vsed, calling that kind of food Garbage, and for prouender also they gaue their horses chopt straw mingled with a few otes, for the which they had a fit instrument of purpose, to cut their straw short for ỹ nonce, with which kinde of diet they made their Horses so hard of ward, so lustie, strong, and liuelie withall, as was a pleasure to behold them. Barlie is cold and drie, yet according to Camerarius, it nourisheth more than Otes, and being lesse raw ingendreth finer blood, and it is the chiefe prouender that is vsed in Italie: notwithstanding, we dare not vse it here in England, for it hurteth our Horses, and maketh their stale to loke red like blood. I thinke the reason is, because that our barlie is not so firme a graine as theirs, nor so drie: for the which cause, I beléeue, that no good mault can bee made of their barlie, like as of ours, for that it wil not swell in the water as ours doth, and specially that which they cal Spelta which is a verie drie grain, long and slender. Otes, according to Galene, vsed as a medicin, doth refrigerate: but as nutriment, it warmeth sufficientlie: notwithstanding, it nourisheth but slẽderlie, because it is a very light graine and of smal substance or strength: and yet I take it to be the most kindlie prouender that may be giuen continually vnto Horses héere in England, and specially the black otes when they are wel dried, and mingled with chopt straw as is before said. Wheat is a great nourisher, and is much commended of manie Authors, to be verie good for horses being wel dried, but it is too costly a prouender to be vsed here in England. Notwithstãding, when king Philip came into this realme, the Spaniardes did vse it much, and gaue their Jennets almost none other prouender, whereat the Artificers & other plaine people in London that knew it grudged verie sore, and the rather, for that there was at that time a great dearth of corne. Some againe vse to giue their Horses blended corne, as pease, fitches, beanes, & wheat bran mingled all togither, which no doubt doth nourish verie much: but I take it to bee a purtie and windie meate, vnlesse the bran doth somewhat correct it. Neither can I greatlie praise our English Horsebread, & espe-

cially

cially, being so vnwholesomly made as it is now adayes, and of such filthy and dusty stuffe. For a horses prouender ought to be sweet, cleane, pure and without all dust and filth, and likewise his haie or strawe that he feedeth on must be sweet and sauourie, and not foistie: for otherwise, it will not ingender good blond, but fill him very full of diseases: thus much of the kindes of meates, and which be best. The qualitie of the horses meate, as whether it be hot, dry, cold, or moist, is most chiefly to be considered, when the horse is sicke, to the intent he may be fed with that meat, which shal be most meet for his sickenesse, whereof wee shal speake hereafter, in the dieting of sicke horses. But as touching the quantitie and order to be obserued in giuing a horse his meat, being in health: you shall vnderstand, that diuers men bee of diuerse opinions, but more for the order than for the quantity. For to say the truth, the quantitie cannot be certainly determined, sith euery horse is not of like stomach, or appetite in feeding, for so that he hath meat enough, it maketh no matter: and there is lesse danger, in giuing a horse to much than too litle, and specially of haie, straw, or garbage. for prouender is to be measured according to his labour, rest or exercise. For if he rest, and be not greatly exercised or laboured, a very little prouender wil serue: but if his labour and exercise be great, then he had need to haue ye greater allowance, to the intent he may be in good lust, that is to say, neither too fat nor too leane: for as fatnes ingendreth euil humors, so leannes diminisheth ye horses strength and maketh him to seeme foule and ill fauoured to the eie. Camerarius thinketh it a sufficient quantitie, to giue a horse half a peck of oates or barly at once for his prouender, or asmuch as a man can easily take vp at six times with both his hands together. And as touching the order of seruing a horse, ye said Camerarius saith, that he ought to haue no haie giuen him in ye morning, but only ye prouender which you do accustomably allow him, and after he hath eaten that, let there be giuen about the third hower of the day, a bottle of haie, which when he hath eaten, let him be watered, and that wil be about the ninth hower of the day, & then cast him another bottle of haie, and within three hours after, which shal be about xii. of the clock, giue him for his nonmeale ye like quantitie of prouender,

that you gaue him in the morning, then about two or three of the clocke giue him another bottle of haie, which as soone as he hath eaten, let him drinke, then in ỹ Euening giue him his night prouender, with somwhat larger measure than he had rther in the morning or at noone. But before the horse smell the prouender, offer him cleare water to drinke, least he be thirsty: and if hee be watred abroad, his prouender being first wel sifted and cleansed of al his filthes, would against his comming be laid ready in the manger, which also must be so clean swept as is possible. Thus you see that Camerarius wold haue a horse to be serued with prouender thrise a day: and yet it appeareth, as he saith, by Xenophons words, that in old time they gaue their horses prouender but twise a day. The Turkes againe at this present, doe vse to giue their horses prouender but once a day, and that at night, allowing to euerie horse at that once, as much as others doe at thrise: and all the day besides, they fede him with strawe, and giue him no haie, but onely after water, and then they giue him an handful or two to sauour his mouth. But according to Vegetius, it is much better to giue a horse his prouender by litle and litle, than all at once: whose words are in this sort. It is not good to giue a horse his prouender all at once, or at twise, but rather by many portions. For when hee taketh it by litle and litle, he doth throughly digest it: but when he eateth it all at once, and greedily, it passeth whole and vndigested through his belly. And as Vegetius would haue ỹ prouender to be giuen him by many portions: euen so do I wish also, that ỹ haie, strawe, or garbage, whereof the horse fedeth all the day, bee giuen him by litle and litle euen as he doth spend it, and not to be laid before him all at once, for that wil loath him, and take away his appetite: neither would I with him to be fedde all the day long: but rather from nonetide, vntill it be three of the clocke in the after noone, to bee bridled, and to stand champing theron, with his taile turned toward the manger. For which purpose, there would be two litle cords fastened to the two postes of partition, to stay his head on both sides, according as I shewed you before, & that shal make him haue a good stomach to his meat, and also to haue a pleasure in his bit. Many Horses, after they haue drunke and eaten their

prouender,

prouender, will fall to pulling out of their litter from vnder the manger, and eate thereon, which the keeper may not suffer, for it is very hurtful and vnwholsome: for the cleaner that the Horse feedeth, the lesse corruption shal breed in him: and therefore, as I said before, whatsoeuer meat you giue him, let it be first cleansed of all dust and filth. The custome also and delight of ỹ horse, the time of the yeere, & his age, are (as I said before) things meet to be considered. First the custome and the delight of the Horse, to the intent he be fed with that kind, whereunto he hath beene most accustomed, and hath most delight in, for that will soonest digest, though perhaps it be not so good. And if you would breake him from any such custome, see that you do it by litle and litle, and not violently, because nature abhorreth all sudden chãges. Secondly, the time of the yeare: for any beast wil eate more in Winter than in Summer, by reasõ of his inward heat. Again, in the spring time, or at the fall of the leafe, Horses would be fed for certain daies with grasse, to scowre them, and to make them cleane within, whereof wee shal talke hereafter in his proper place. Moreouer, as Rusius saith, horses that stand in ỹ stable, would be housed in Summer season with canuas to defend the flies, and in Winter with a thicke woollen housing cloth, to kẽp them warme, which some againe do not allow, saying ỹ it maketh a horse too tender, & therfore would haue them to be housed with light canuas all ỹ yeare long: which is necessarie for two causes, the one to kẽp their coats cleane from dust and raying, and also from the stinging of flies in Summer season: and such housing cloths of canuas, would be made to couer not onely the body, but also the neck and head. Finally, the horses age is also to be considered, to the intent hee may bee fed with such meate as is most agreeable to the same: for whileſt a horse is young & growing, he would be fed either with grasse or haie, and not with strawe, and such hard and drie meate, for feare of hindering his growth. Againe, in his olde age, he had need to be fedde with soft meat, because his teeth perhaps wil fail him, so as hee shall not be able to chawe his meat, if it be ouer hard, and then he cannot continue, but wil soone pine away and dye.

What water is good for a horse to drinke, and whether it bee good to wash a horse or not. Chap. xvi.

HItherto wee haue talked onely of the horses meate, now let vs speake somewhat of his drinke. The authours doe not altogether agree, touching the water whereof a Horse should drinke: for Vegetius would haue it to be very cleare and cold, alwaies springing & running, but not ouer swift. But Aristotle saith, that a horse delighteth rather to drink of that water which is somewhat troubled and thicke, insomuch as if it bee too cleare, he wil not drink thereof, vntil he hath stirred, or troubled it with his foot. Rusius also saith, that the water would bee somwhat brackish, or salt, or at the least somewhat thicke, and therewith little or nothing at all: for such waters (as he saith) being warme and fattie, doe nourish a great deale more than those that be colde, and do run swiftly. Notwithstanding, in Summer season, when the weather is hot, such colde waters may bee very wel suffered, and specially if the horse bee vsed thereunto, whose vse and custome is chiefly to bee considered at all times, and in any case beware of sulphurie waters, such as be at Stokwie in Cambridgeshire, and diuerse other places of this realme: for many horses haue taken their bane by drinking of those waters. But because a horse cānot be fat, vnles he drink abundantly, it is very necessary (as Rusius saith, somtime to rub ȳ inside of his mouth with salt dipt in wine, and that shal make him both to drink, and also to eate with the more grædy appetite. For thogh a horse (as Aristotle saith) delighteth much to drink, yet he is able to abstaine from drinke foure daies. Petrus Crescentius would haue a horse, when hee should drinke, aswel in the Morning, as in the Euening, to bee led faire and softly to the water, and not to be galloped, either to or fro (as the shrewd boies and lackies so wel in France, as elsewhere most commonly vse to doe) for feare of hurting his winde. Notwithstanding, dayly after water it is good moderately to chase him vp and down, or otherwise to stirre him in the stable to warme ȳ water in his belly. Moreouer, the same Auth. 2 would haue a horse to stand somtime in the water vp to the knées, ȳ space of two or three houres together, whether the water be fresh or salt. For the fresh water saith

saith he, with her coldnes, and also the salt with his drinesse dooth let the humors from descending into ỹ horses legs, & to preserue him from many griefes. But if the horse be leane and in pouertie, let not the water come to his belly, for if the water ouermuch coole his belly, he shall not feele that his meat doth him any good. But it is good for fat horses, to stand oftentimes vp to the harde belly, for it will abate their fat, and kéep them in a sound and in a mean estate. Moreouer, the same Petrus Crescentius would not haue a horse brought againe into the stable after he hath drunk, vntil his legs be throughly wiped and wel dried, affirming that the vapors of the stable in moist legges doe ingender ỹ cratches, windgalles, and such euill sorances. Some Authors againe, as Vegetius, Camerarius, & Xenophon, would haue a Horse to wet his fot as little as is possible, for fear of softning his houes, vnlesse it be to ease some griefe he hath in his legs, whereof we shal speake hereafter. Moreouer, Camerarius thinketh it a great deale better for Horses to be watered abroad, than in the stable, vnlesse some great necessity doe otherwise require, and then hee exhorteth the kéeper to be carefull, that ỹ water which he offereth vnto his horse be swéet and pure, without any moats or strawes: and whensoeuer his horse hath laboured and is hotte, he would not haue him to drink, vntill hee hath staled, and bee throughly dryed of his sweate. Now, as touching the washing of horses, most Authors allowe it in Summer season, wishing fat and lusty Horses sometimes to be ridden or driuen into some rũning streame, euen ouer the back, which in the hot dates is maruelous good to refresh them, so that they were not trauelled, nor sweate not before: for that were verie dangerous, and specially if they should take colde vpon it: but in Winter season, horses would be washed very seldome, but neuer after labour, vnlesse it bee with a litle wine or beere boyled with butter, or else with warm dish water, to supple their legges, and to comfort the sinewes of the same. Yet it is a common thing here amongest vs in England, to wash our Horses after their labour in Winter season, if they be very fowle: and specially, if we chance vpon a pit méete for the purpose at our iournies end, not regarding whether our horses sweate or not, which vse marreth many a good Gelding,

and maketh them lame and stiffe in short space.

Of the diuerse kinds of mooving and rest belonging to a horse: wherein is declared how, where, and when a horse should be curried, kempt, and trimmed: also how his keeper should approche vnto him, and whether it be good to curtaile horses or not. Chap. xvii.

OF mooving belonging to a horse, there be three kindes, that is, currying, exercise and labour. And first, as touching the currying of a horse, if it were méete and requisite to bee so curious, I could make as many differences thereof, as the Physicians do of friction, and rubbing belonging to a mans body, which in all be fiue, that is to say, harde to bind the flesh and muscles, soft to lowsen, much to extenuat, mean to increase, rough or sharp to draw humors to ẏ outward parts, and gentle or soft to retaine ẏ same in the members. But forsomuch as horses for ẏ most part take more hurt by ẏ lacke than by superfluitie of currying. I wil onely make three differences. that is, hard, mean, and soft, and that also according to ẏ places of the horses body. For whereas it is thickest of skinne, hair and flesh, there I wold haue him to be hardest curried, as his neck, and buttocks. But his back and sides, flanks, belly, & thighes, with a moderate hand. And as for the ridge of his back, it wold neuer be touched with combe, but onely with the hand, and the bare part of his belly next vnto his coddes, would bee curried maruellous softly, or rather not at all, but onely rubbed faire & softly with a wispe or cloth. Moreouer, some horses are thicker coted than others, and therfore shift of combes are necessarie, whose téeth would be filed of purpose, sharp, or blunt, déepe, or shallow, not onely to serue diuers cotes, but also the diuerse parts of the body before rehearsed. But to the intent the kéeper may be ignorant in nothing, it shall not grieue me heere to rehearse both the time and order of currying of a horse, prescribed by Xenephon an ancient writer, and a noble Gentlemã, in his book de re Equestri, & also by Camerarius, his interpreter, and a later writer of the same matter. A horse then, saith Camerarius, would be curried, & haue his mane and taile kempt with a wet combe both euening and morning before he be watered, & that not

not in ỹ stable, but without, in some dry inner court paued with round stone, entry or porch, mēt for that purpose, and specially in faire weather, when it raineth not, so that the keeper see better to trim him, and to rid him of all filth. And in olde time, when a horse was brought forth to be curried, he was not brideled with any bit, but only had a headstrain put on his head, which did restraine him from biting, without hindering his breath, whereby he was tied vnto a ring fastened in some wal or post of purpose, either short or long, according as his good or shrewd demeanor required. And to the intēt the keeper may haue the more sure accesse to any horse that he dresseth, Xenophō doth counsel him neuer to come behind him, nor yet before him, but alwaies on his side, and to stand close vnto him, so that hee bee cleane out of danger: & when he commeth to curry him, he would haue him to begin first with his vpper parts, as with his necke, and then with his sides, belly, buttockes, & thighs orderly: because it were in vaine, (saith hee) to make cleane the nether partes, the vpper parts being still fowle, for so the nether parts must be twise dressed: but hee may not once touch the ridge of his backe with any combe, but with his hand or cloth, stroking him alongst ỹ haire faire and softly, and then to brush out al the dust of his cote with a cloth of rough canuas or haire, as they cōmonly do vse at this present, in stead whereof they vsed in old time a little short sword made of thin lath, wherewith they beate the dust out of his coat. Some again had rubbers for that purpose, made of the barke of date trées, wherewith they made their coate so slike, as they did shine. But his head being bony, may not bee touched with any combe: but only washed with faire water, or else rubbed with a dry cloth: neither would the bare part of his belly be kempt. His legges also from the knées downward would not be kempt, but rubbed with a cloth or wispe of dry strawe. Neither would Xenophon haue a horses legges or thighes to bee washed, as some vse to do, for feare of softning his houghs. But as for his mane, foretop, and taile, he would haue them to be kempt with a wet comb, and that shal make them grow, which is very necessary: for though his foretop be long, yet it can neuer hinder his sight: yea, rather it defends his eies from al noisome things. It is also

requisite, that his mane be of a reasonable length: for besides the comelinesse or beautie thereof to the shew, it is also a good help to the rider, whensoeuer he will take his backe: and as for his taile, the longer it be, hee shal the better defend himselfe therewith in summer season from the flies. And therefore Camerarius doth not a litle maruel at those which vse to curtaile their Horses, and to shear their mane vpon euery light occasion, as perhaps, because the haire falleth away, or that they be ewing tailed, & séek not rather to remedie such faults otherwise, & to preserue the thy ỹ natural beauty of the horse, without the which, he is not only fowle to the eye, but also infamous. And though som hold opinion, that such curtailing maketh the horses backe the stronger, without alleging any great reason why, yet such strength doth not countervaile the great deformitie and infamie: which to auoyde, the Italians will finde the means, if they hap vpon a curtail, to deck him with a fained taile of horse haire, and that so cunningly, as it cannot be séene. Yet héere and in France, it is no shame at all to ride vpon a curtaile, so much hath custome prevailed against nature. There be som kéepers also that delight much to winde vp their horses foretops in a lace of diuers colours, which Camerarius doth not allowe, affirming it rather to be a deformitie than any beauty to the horse. And if they do it to the intent the horse should sée the better, they be reproued by Xenophon, which saith, as you haue heard before, that the foretop doth not trouble the Horses sight at all. Notwithstanding, it is a comely thing to kéepe both that and his mane at a reasonable length, by pulling it from time to time, as neede shall require. And to make it lie smooth and euen, it is very necessary to kembe it with a wette kombe: yea, and perhappes sometime also to braid it. But a cleanelie Horsekeeper also must not be without his sheares, as well to sheare away the haire of his necke behind his eares, where the headstall should lie, about the breadth of thrée fingers onely; and no more, without diminishing any part of his foretop (for that were vnseemely) as also to sheare the inside of his eares in Summer season: for in Winter, some thinke it were better to let the haire growe to defende the colde from entering into his head. Thus much of the curryng

and

and trimming of a horse, wherewith Columella saith he is much delighted, and it doth him as much good as his meat: which thing the Italians & Spaniards do verie wel consider, for their Horsekéepers doe neuer lie from their horses héeles, neither must they be absent an halfe houre in a daie, but must be alwaies at hand, readie to wipe awaie euerie mote that falleth, wherby their Horses coates are kept so clean, as if ye rub on them with a veluet coate, no dust will cleane thereunto. But now let vs speak somewhat of the exercise, labour and rest of a horse.

Of exercise both moderate and vnmoderate, and of the effects thereof. Chap. xviii.

AS exercise rightlie vsed doth greatlie preserue the healthy of the horse, by increasing his naturall heate, which strengtheneth his instrumental members, & maketh them the more able, both to draw, and also to digest that nutriment, wherwith the horse is fed and nourished: euen so, if hee be peruerslie vsed, it maie greatelie decaie his healthy. That exercise maie be rightly applied, two thinges are néedeful to be considered, that is time and measure. For such that moderate exercise (as I said before) helpeth digestion, it is onelie to be vsed in the morning or euening, when the horse is emptie. For if he be exercised vpon a full stomacke, it will cause him to digest his meat sooner than nature requireth, which is a rawe digestion, and neuer bréedeth good blood, but filleth the bodie full of humors. Measure also is much to be regarded in exercise, for otherwise it may quicklie growe to an extreame labour: & therfore exercise would be continued no longer, than vntil such time as the horse beginneth to sweat. For if he sweat vntil he drop, it is a signe of extenuation, and therefore it is good to leaue off somwhat before, so shall it not weaken him, but do him much good, and strengthen al the partes of his bodie, after which exercise, sée that he be well walked, rubbed and trimmed, and that he drinke not, vntil hee be throughlie cold. Thus much of moderat exercise: which ye oftner it be vsed, the more healthful & the stronger shal the horse bee. But labour and trauel is of another qualitie, decaying rather than increasing a horses strength, as when a horse is iourned, or seruethin

in the field, or runneth at the ring, tilt, and tornie: yea, and when he is first brokē or schoold, it is a great labour vnto him: & no exercise at al. Notwithstanding, if time and measure be obserued in these labors or trauels, the horse shal continue the longer, and I see no cause why, but that they ought and may be very wel obserued, in all kind of trauel, vnlesse it be, when the horse serueth in the field: for there, neither time, nor measure certaine, can be appointed: yea, there it sufficeth that they be wel meated, which many times is not to be had, albeit an old beaten soldier wil fauour his horse, & shift better for him, & make him to continue in courage, a great deale longer than ỹ negligent & careles yoūg souldiers most commonly doe, which for the most part, take so much of their horses when no nēd is, as when nēde indēd requireth, their horses are able to do nothing. And yet these whilst they serue in the field, sēme to be more excusable, thā those that being quiet at home, whēn they run at ỹ ring for their pleasure, wil not let, euen in the very heat of the day, to giue their horses eight or nine courses, one after an other, whereas foure or fiue were sufficient for one day, & those also would be giuē with some pause betwirt, & that very early in the morning, when ỹ horses be empty, or in some other cold time of the day, so shal their health & breath be best preserued, & their mouths not distēpered. Likewise ỹ rider when he breaketh a young horse, must haue an especial regard to time and measure, & throughly consider the disposition, quality, and strength of the colt, to the intent he trauel him not aboue his force. But to vse time & measure in this case, requireth not only a good discretiō, but also a maruelous patience: for lacke whereof, many riders, whilest they seeke to teach their horses much at once, they make them so dull, heauy and faint harted, as they learne nothing at al: yea, & many times by ouermuch rashnesse they make them also stark lame & crooked. Wherfore I wish that al riders lacking patience, hadde that patience which I know to be in my very good friend, M. Ashley, Maister of the Iewel house: which his patience, if it had not bēne very great in dēd, he could neuer haue brought some of his horses to that perfectiō, whereunto they now are come. Thus far of such labors and trauels, as most commonly do sēm to be but moderate

rate exerciſes, and yet indéed as I ſaid before, be no leſſe labors then iournying is, whereof I purpoſe now to ſpeake.

How a horſe ſhould be prepared againſt he be iournied, and how to make him to receiue the bridle, and alſo how the keeper ſhould lead him when he doth bring him foorth, and finally how he ſhould be vſed and dieted whileſt he is iournied. Chap. xix.

But firſt, it is méet that I declare vnto you the precepts giuen by Xenephon, Camerarius, and Laurentius Ruſſius, and diuers other Authours, touching the preparing of the horſe that is to bee iournied. Firſt, then ſée that hee bee wel ſhod, that is to ſay, with ſhoes that be neither too ſhort nor too long, but méet and anſwerable to his houes. And as Ruſsius ſaith, the lighter and ſtraiter the ſhoes be the better, for ẏ lighter they be, ẏ eaſier ſhal the horſe lift vp his féete: & the narrower that they be in compaſſe, ẏ greater & ſtronger wil his houes bee, ſo that they be not ouerſtrait, for then they wil pinch his féet, and cauſe him to trauel with pain. But as touching ſhoes and the order of ſhoing, we ſhal ſpeak therof at large in the end of the Ferrers office, whereas you ſhal ſée the ſhapes of al manner of ſhoes ſet forth in figures. Your horſe then being wel ſhod ſée that his ſaddle be méet to his back, that is to ſay, neither too wide nor too ſtraight: for if it be too wide, it wil ſhogge vp and downe and ſo hurt his backe, neither can the Rider haue any ſteddy ſeat therein. Againe, if it be too ſtraight, it wil preſſe his backe and gall him, wherfore ſée that the panel be wel ſtuffed, & that the ſaddle ſtand ſteddily on his back, hauing no occaſion to grieue him, nor to gall him any maner of way, and in Summer ſeaſō let his ſaddle be ſo light as may be, for a heauy ſaddle by kéeping his back too hot, may cauſe diſſolutiō of humors, aſwel in his withers as in other parts of his backe, whereof may ſpring diuers great ſorāces, to the vtter vndoing of the horſe. Moreouer, ſée that the Girths be ſure and ſtrong, and that the buckles and tongues thereof bee whole and ſound, and alſo the thonges whole & faſt nailed, whereunto they ſhould be buckled. And when you gird your Horſe girde him forewarde and not backward towards the flanke, for that wil make his belly and

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sides to swell, and grieue the horse in his guttes, by meanes that the wind is inclosed in a narrower room than it was before, and pent in, so as it cannot easily get out. A diligent horseképer wil also sée, that the stirrops and stirrop leathers, the paitril and crowper, with all kind of other harnesse be strong and sure, & therewith cleane and neate, and that euerie horse haue his owne bridle, wherewith he is accustomed to be ridden, and that none of them lacke either kirble, or kirble hooke, or any other thing belonging to the bit, headstall, or reanes. And when the horseképer commeth to bridle any Horse, Xenophon would haue him obserue this order. First, that he come on the left side of the Horse, holding the headstall togither with the reanes in his left hand, & after that he hath put the reanes of the Bridle ouer the Horses head with his right hand, euen vp to ỹ pointes of his shoulders or withers, then let him shift the headstall into his right hand, & put the bit into his mouth with the left hande: which if the horse wil not readily take, let him not force his mouth with the bit, by rubbing his gummes therewith (as some do) for that wil make him to abhorre the bit so much the more: but rather that he cause him to open his mouth, by thrusting in his thumb into ỹ hinder part of his mouth, and if that wil not serue, then with his thumb let him presse downe his neather lippe vpon the neather tush, & that for the most parte will make any horse to open his mouth. And sée that the bit by standing too high in his mouth, presse not his wickes (for that wil bréed cornie flesh, and make him harde mouthed:) nor againe by hanging too low, giue the Horse libertie to take it betwixt his téeth at his pleasure, and so not suffer to be ruled, but as he list himselfe. Xenophon, and al other ancient writers, do vtterly reiect that horse as vnprofitable, that wil not suffer to be easily brideled, and therefore do counsel euery man, when he buyeth a horse ready broken, to proone first, whether he wil be easily brideled or not, otherwise not to buy him. And to the intent that a horse may willingly receiue the bridle, they write that it is very good to vse to bridle him, a litle before you giue him his prouender, and then to pull it off againe, so shal he not refuse it, when you would put it on to labour him. The horse then being thus made readie, let him stand with his taile turned

towards

towards the maunger, and champe on the bridle being fast tied with the two cordes, vnto the two postes, (as is aforesaid) vntill his rider or maister be ready to take his backe: so shall hee not striue to pull any haie out of the racke, or to rubbe against any thing, or to foile his saddle or harnesse. And when you bring him forth, Xenophon would not haue you to lead him behind you, at the length of his reans end, for that wil giue him too much libertie to plaie his vagarie, but rather to take him either by the side of his headstall, a litle aboue the portsmouth, or else to hold both the reanes fast together, hard to the cheeks of the bridle, keeping your selfe alwaies close to the horse side, so shal he be able to hurt you no maner of way, nor any other horse that standeth by, but that you may guide him as you wil your selfe, by keeping close to him, & going round about with him. And when his rider or master commeth to take his back, let him come vnto him quietly, and after a gentle sort and not rashly, to the intent the horse may more willingly receiue him: & when he mounteth let him take the reanes in his left hand, holding them so slack, as that neither in his going vp, nor when he is vp, he straine or pinch the horses mouth with the bit. Xenophon would haue a souldiour to vse sometime to take his horses backe on the right side, to the intent he be ready on euery side, when néede shal require: then being mounted, let him not stirre his horse, but settle himselfe and his clothes about him, and make his reans iust and euen: that done, he may giue him a turne or two on eche hand, and so proceed faire and softly on his iourny, and specially at his first setting forth, vntil his horse be throughly breathed, and then he may cause him to amende his pase without danger, but so it be neither too swift nor too slow, but in a meane, to the intent he may continue in the same, which is much better for the horse to do, than somtime to go swiftly, sometime slowly, sometime to run or gallop, and sometime to stand still: by meanes whereof, more horses are surfeited and cleane destroyed here in England (I beléeue) than in any other countrey. Againe, our men wil not stick to ride forty, fifty, threescore miles a day, wherewith it is vnpossible for any Horse or Gelding to continue any long time. But the discreete Italians, thinke it sufficient to ride fiue and twenty, or thirty

miles

miles in a day at the most, and that they doe most commonly without taking any baite, neither do they willingly labour their horses in the great heat of Summer, nor yet in the extream cold of Winter, which Rusius also forbiddeth, rendring the cause why, in this sort. A horse (saith he) would not be sore laboured, from the middest of July, vnto the end of August, because that ouermuch heat and labour wil inwardly dry vp his moisture, and waste his body anon. And therefore in such time the horse (as hee saith) would rather be kept in cold or moist places, & be fed with grasse, or else with sweete new hay, then to bee laboured. Againe, a horse would not be laboured in ỹ heart of winter, as in December, or January, for feare of taking cold after sweate, which then is sone don. Moreouer, the same Rusius saith, that riding late in the euening, doth hurt a horse very much: because that not onlie through great labour he may sweat so much, as he cannot be dry in a conuenient time, and so as hee may bee safely watered, and haue his prouender giuen him in due season, but also surfet of cold, by meanes of the cold aire of ỹ night immediatly following vpon his sweat: for the aire of the night, is farre colder than the aire of the day. And therefore for all respects, hee doth allow the Morning to bee the best time of the day to trauell in. And whilest I talke here of trauelling, by the way I think it good to tell you of a very good custome which the Italians vse, and that is this. Betwixt whiles, when they come to any faire soft grẽ plotte by the high way side, they prouoke their horses with their voices, & whistling, to stale, & otherwise to ease themselues, which is a great refreshing to the horse: & the cause why they chose out such a soft & grassy plot is, to the intent that ỹ horses stale should not sprinkle vp vpon his legges, and scald off the haire, which is very hurtfull to the horse, and yet little regarded of many of our countrimen, which doe vtterly omit to prouoke their horses to stale in any such place: yea, many times they wil scant stand still or offer their horses to stale, when they would do it of their owne accord. It is a great refreshing also to a horse in Sũmer season, when you passe by som water, meet for the purpose, to be ridden in, almost vp to the belly, & so out againe, & whensoeuer you let him drinke by the way, wash his mouth well first, & let him stand

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in the water aboue the knees: for, for to stand cold or shallow, (and specially if he be hot) is the next way to founder him: and when you come at your Inne, if your horse be any thing hot, see that you giue him neither meate nor drinke, vntil he be well cooled, which Rusius wold haue to be done, by walking him vp & downe faire and softly: during which time, he would also haue him to be couered with some warm cloth, for taking of cold. Notwithstanding, the Frenchmen do seldome vse to walke their horses, and specially in the cold aire, but rather doe set them vppe by and by in the stable without meate, couering them with some warme blanket or couerlet, and seeke to cole them by continual rubbing and trimming of them, wherein the Hostilers of France be very painfull and diligent, and will doe more for a French penny, than one of our men will doe for an English groate: and in Summer season, they will cleane take off his saddle, and couer him onely with a little fresh straw, casting a light blanket ouer the same, girt with a surcingle, which dooth refresh the Horse marueilously. And though in winter season, it be not good to take the saddle cleane away for any long time: yet it is very good to take it away whilest his back be rubbed with fresh straw alongest the haire, and to strow a little thereof vppon his backe, and then immediatly to set the saddle on againe. For the fresh straw shall both dry his backe, and also the pannell of the saddle. I shall not néede here to put your horsekéeper in remembrance, to sée that euery thing about the horse bee made cleane orderly, while he is adressing, sith euery Hostiler can doe that without any teaching: but onely to charge him that he giue him neither water nor prouender before that he be throughly dry, but only a little swéete hay to refresh his mouth. For (as Rusius saith) by meanes of labour, the natural heat of the horse is dispersed into the outward parts of the body, and so he is but weake and féeble within, and not able duely to digest the meat which should then be giuen him, and not beeing perfectly digested, it brédeth oppilations or stoppings, & filleth the horse full of corrupt humours. And if your Horse be any thing fainte, it is very good (as some write) to giue him a sop or 2. of bread in wine. Vegetius praiseth wine and oile to be giuen him cold in Summer, and luke warme

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in Winter: also his mouth and tongue to be washed with water and salt. Or let not, according to our country vse, to giue him a pint of good Malmesie, and that shal comfort his heart, and all his vital spirits, in such sort as I haue knowne a Gelding to bee ridden fourescore miles in one day for a wager, without any other bait. And, to say the truth, a great bait in the day time is not good, & specially when he must be laboured vpon it. Wherfore I would wish him to haue but a litle prouender at none, and a great deale at night, to the intent he may slépe wel vpõ it, which slép is the mother of digestion, neither is it good to giue him any thing in the morning when he should trauell, as some men vse to doo. For the more empty that he be in the morning, the better he shal labour: but in any case let him be throughly curried first and well drest: and at euery baite, let your Horseképer haue a speciall regard to your Horses backes, that their saddle pinch them not, and to their féete that they lacke no shooes nor nailes: and sée that he empty their hooues & search them wel for fear of gravelling, taint, or hurt, with stone or otherwise. And in sũmer season, when the wates be hard, it shal be good euery night, after he hath cleansed their hooues, to cram them ful of cow doong, for that will both allwage ỳ paine of surbating, and also make their hooues tough. Hitherto of exercise, labour and trauel: now let vs speak somwhat of rest, which as it is very necessary sometime to restore a wearied or tired horse to his strength, or whilst a horse is scowred with grasse, or finally in any other time, when either sickenesse or any other occasion shal require rest: euen so, when a horse is in good lust and health, there is nothing more pernicious & hurtful to his health thã rest. And therfore as I said before, ỳ health of a horse is onely preserued by good diet, & moderat exercise: which things being wel obserued, he shal seldome or neuer haue néed of the Ferrers helpe.

## Of the sleepe and watch of a horse, and how hee should be littered. Chap. xx.

Sleepe is so necessary a thing to euerie beast that hath féeling or mooving, as it cannot liue without it. For sleepe causeth digestion, and thereby nourisheth the bodie: and whilest the beast slépeth, the powers animall doe

take their rest, without the which, they should be some wearied, and were not able to doe their office, and to continue their actiõs and operations, which (as I saide before) is to giue feeling and mooning to the beast. And whilest they rest, the powers naturall haue the more libertie to doe their office, in digesting the meate and nourishing the bodie. So that sléep may wel be defined to be the rest or quieting of the senses, appointed by nature for the restoring of strength. Sléepe, according to the Philosophers, is not ingendered of sharpe or subtile vapors (for those doe rather hinder sléepe than further it) but of sweete, fatty, and grosse vapors, eleuated from the hart to the braine: with the coldnesse of which braine, those vapors being congealed and thickened together, doe stoppe the pipes of the sensitiue spirits so as they can not resort to the instruments of the senses, to giue feeling or mooning to the body, and so ẏ body for that time is depriued of sense and mooning. And according as those vapors doe more or lesse fil the pipes: so is the sléep of the beast more or lesse sound or sure. But as touching the sleepe of man many thinges are to bee considered, as the time, ẏ quantitie, ẏ order of lying in his bed, and his dreames. Whereof few or none are néedfull to bee considered in a horse, because the beast is a better obseruer of Natures lawes than man, and will neither sléep more nor lesse, nor at any other time, than nature doth require, vnlesse he be sicke. And as for the order of his lying, Aristotle saith, that a horse sléepeth as much standing as lying. Notwithstanding, as that horse which seldom or neuer lieth, is not without some greefe, either in his backe or bodie: and therfore is afraide to lie downe, least hee should not be able to rise againe: euen so, that Horse which coueteth to lie downe oftner than he should, séemeth not to haue very strong legges. But sith all Horses for the most part, doe lie some part of the night to take their reste, the kéepers office is to litter them wel at night, so as they may stand vp to the belly in freshe strawe: and specially in Winter season: for according to Petrus Crescentius, the warmer and softer they lie, the better. And therfore the strawe would be well shaken with a forke, and couched vp round together, of purpose. And therewith let the kéeper remember to tie his horses so, as they cast not themselues in their

own collars, or halters, in their lying downe or rising vp. Thus much of the horses slæpe: for of his watching I shal not nede to speake, sith slæpe and watch be two contrarie passions, occupied both about one subiect. And therefore no beast can alwaies slæpe nor alwayes watch, but doe somtime the one, and sometime the other. Neither nēd I here to speake of the horses dreames, for thought he dreameth somtime in dēd (as Aristotle & Plinie writeth) yet what auaileth it, vnlesse hée could also speake, and declare them as man can, wher by many times is known what humors in mans bodie do chiefely reigne. Wherfore I will ende this chapter and go to next, wherein wee shall talke of thinges that be of more importance.

## Of repletion and emptinesse, and of the diuers kinds thereof. Chap. 21.

HIppocrates sayeth, that physicke consisteth onely in adding to, and taking fro. Wherefore some thinke that all the whole art of physicke may be well referred to repletion and emptinesse. Of repletion there be two kinds, wher of the one is with humors, the other with excesse of meate, which oppresseth the spirits, & causeth sicknes. Again, that with humors in two sorts: for if the bodie be full of humors equally increased together, then it is termed of ỳ physicians Plethora, that is to say abundance of humors. But if the body be ful of choler, Melancholy, Fleame, or watrish humors, then it is called Cacochimia, that is to say, euil iuice or nutriment gathered together in the conduites of the body, for lacke of good digestion. Againe, there is repletion in quantity and qualitie: in quantitie, when the body is too ful of bloud, or any other humor. Repletion in quality is when any such humor is too hot, or too cold, too grosse or too thin, & such like. But as all diseases that spring of repletion must be healed by euacuation or emptinesse: euen so all diseases that come of emptines belonging to mans body, must be cured by repletiō. There be diuers waies, as by letting bloud, by purgatiō, by vrine, by vomite, by frictiō, scarificatiō & boring, by sweating, bathing, exercise, fasting, bléeding at the nose, & diuers other waies not nēdfull here to be rehearsed, and specially sithe

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mine intent in this chapter, is onely to shew how & when a horse ought to be scowred, either by letting him bloud, or with grasse, or by purgation for the preseruation of his health, & for curing his diseases, and also what kind of meat will fat him soonest, leauing to speak of all other kind of euacuation belonging vnto a horse, vntill I come to the particular cures of his diseases.

How and when a horse should be let bloud, and to what end, and by what signes a man may knowe whether it is requisite to let him bloud or not. Chap. xxij.

THe opinions of the Authors, touching the letting of a horse bloud, are diuers. For some, as Petrus Crescentius, Laurentius Rusius, and other do think it necessary for the preseruation of his health, to let him bloud foure times in a yeare, that is to saie, in the Spring, in Summer in Autumne, & in Winter. Maurus, againe to saue him from diuers infirmities, thinketh it good to let him bloud three times in the yeare. First in the beginning of May, because the bloud beginneth then to increase. Secondly, in the beginning of September, to the intent that the bloud, being then inflamed by inequality, may euaporate, or breath out. Thirdly, about the middest of December, to let out the grosse and knottie bloud. Some againe would haue a horse to be let bloud but once a yeare, and that in May, before he be sent to grasse: affirming that if he be not let bloud in the Spring, the new bloud being mixt with the old corrupt bloud, will bee soone inflamed, & so perhaps cause the horse to fall into some grieuous sickneesse. That it is kindly for a horse being lustie and strong, to be let bloud once a yeare, is prooued by the euident experimēt daily seene and known in the horses of Polonia, which of their owne naturall instinct & disposition faile not yearely to let themselues bloud. Notwithstanding, Vegetius saith, that ỳ most ancient and discréete Authors forbid any horse to be let bloud, before he hath great néede, least such customable letting of bloud being at any time omitted, might breede some sickneesse in the horses bodie. Besides that, often letting of bloud, causeth debility in the beast, hindereth the sight, and maketh the bloud to resort inwardly, which cloyeth the heart and intrailes, and leaueth the

outward parts destitute, whereby they ware fat, grosse, and vnweldie. And therefore hee doth not willingly consent that anie horse, and specially being verie yong and healthful, should be let bloud in any place, but onely in the palate of his mouth, which is very necessary (as he saith) to be oftē vsed: yea, euery moneth, as well in those that be yong, as of a middle age: affirming that it greatly releeueth the head, the eies, and the brain, and prouoketh appetite to meate. Yea, and he doth not mislike, that al horses of a middle age, should be let bloud in the necke veine, whensoeuer they be sent to pasture, vnlesse they be stallions, or geldings: for then, saith he, they haue no nēede thereof. The stallions, because they shall spend their bloud fast inough he in couering of Mares: for one ounce of sēede, doth countervaile many ounces of bloud. Yet, whē they cease to be vsed any longer as stallions. Absyrtus would haue them euerie yeare when they are put to grasse, to be let bloud: for otherwise, they will ware blinde, by meanes that those humors, which were wont to be purged the other way, will now resort to their eies. Again, geldings would not be let bloud because they lacke their stones: whereby the naturall heate is much decaied. Notwithstanding, experience teacheth vs here in England, that to let our geldings bloud once a yeare doth them much good, & specially if they be ranke & lustie, because they haue as I take it, more aboundance of bloud by reason of the coldnes of the country, chā those that be bred in hoter climate. And therfore in letting any horse bloud, the region is alwaies to be considered, & therwith ỹ time of the yēere, of the day, and of the moone and also the age, strength, and custome of ỹ horse. The best time of the yeare to let bloud in, according to the best writers, is the spring, because that time is neither too hot, nor too colde, but in a meane. Besides that, the old bloud being let forth, the new bloud then comming on (as some hold opinion) shall be the more pure, which otherwise being mixt with the old bloud, would be corrupt and brēede some sickenesse. The best time of the date, is the morning: so that it be not immediatly after waking from sleep: but about an houre or two after. Againe: Rusius woulde haue the Ferrer when he letteth a horse bloud, to forese that the Moone be not in that signe which is answerable to that part of the bo-

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die wherein he doth let him bloud, and specially if the horse bee whole: for if he be sicke, and that of any sharp disease, ỹ meane is not to be tarried vpon. The age, strength, & custome of the horse, are to be considered, because if he be yong & not at his full growth to let him bloud would hinder his growth. Againe, if he be verie old, he had more need to haue his bloud increased, than diminished. And according as the horse is weake or strong of nature, and hath bin accustomed heretofore, so ought he to be let bloud more or lesse, accordingly. For some horse may spare two or three pound of bloud: to some againe, the one halfe thereof perhaps may be too much. The signes to know whether a horse hath need to be let bloud or not, according to Laurentius Rusius, be these: His eies will ware red, his vaines will swell more than they are wont to do. Also he shal haue such an itch in his skinne, and in his necke, as he wil alwayes be rubbing and scratching, & the haire of his mane will fall away. Also if hee hath red inflations or bubbles on his back, or digesteth not his meat wel, it is a signe that he hath need to be let bloud. For sithe that many grieuous sicknesses do most commonly follow after these signes, it is good therefore (as he saith) to vse remedie betimes, & alwaies to withstand the beginning of euils. Moreouer Vegetius would haue ỹ horse, which should be let bloud, to be thinly dieted a day or two before, to the intẽt his bodie may be quiet and not troubled with indigestion, and at the time of his letting bloud, to be placed vpõ an equall ground. And after that ỹ Ferrer hath bound his neck straight with a corde: then, to the intent the veine may the more euidently appeare, Vegetius would haue him to wet the veine often with a spunge dipped in warme water, and to take hede that he strike not the artire which passeth through his throate in stead of the veine, for that may put the horse in iespardie of his life, and after that he hath striken him in the right veine, to giue him a little haye, or the grene blades of corne to chew on. For the mouing of his iawes will make the bloud to spinne out the faster, which bloud Vegetius would haue to be kept and saued, as well for medicine in time to come, as at that present, to annoint the horses bodie therewith, being mingeled with a little vineger and oile; and specially the place where he is let bloud. For it

is endued with a certaine natural vertue and power, to comfort the weak and feeble members of the horse, and to drie vp euil humors. But when the Ferrer hath taken thereof sufficiently, and stopped vppe the hole, the horse would be carried into some close warm stable, and specially if he be tender and delicate, and there to be wel littered with fresh straw vp to the belly, and fed the first day either with greene blades of wheate, if it be in such time of the peare as it may be gotten, or else with verie swet & fine hay and good prouender cleane sifted, and offer him cleane water to drinke, at any time that you shal perceiue that he hath thirst, cõtinuing so to diet him if need be, for ỹ space of seuen or eight daies together. And if he be feeble, it shall be good to giue him a mashe, made of ground barlie and wheat branne, and then afterward by little and little, to bring him into his old accustomed meats. And within two or three daies after that the horse hath bẽn so let bloud in the necke, Vegetius wold haue him to be ledde into the sunne, and there to be let bloud in the palat of his mouth, and then in som warm day to be washed in the sea, or in som fresh stream and wel dried againe. Moreouer he saith, that it is good to rub & chafe all his bodie in a morning in the warme sunne wt oile and wine mingled together: For by such rubbing & chafing, you shal bring his bodie againe vnto his former and naturall heat, so as it may be able to abide aswell the iniuries of the aire, as to bee carried: which things being done & past, Horses of seruice may be put againe to those vses and labours whereunto they were wont to serue.

## How and when a Horse should bee scowred with grasse or otherwise, and also what meats willsoonest fatten him. Chap. 23.

RVsius saith, that to keepe a horses body in good state, it is verie necessarie to purge him once a peare at the least. In his time in Italie, and specially about Rome, they vsed to scowre their Horses with that which the Latines call Farrago, which indeede is the greene blades of corne, and not a mixture of diuers ripe cornes mingled together, as the Dictionaries and diuers other Authours doe interprete it, as it shall well

well appeare vnto you by the words of Nemesian and Vegetius and other ancient writers. For Nemesian sayth thus:

*Pasce igitur sub vere nouo farragine molli*

*Cornipedes, &c.* That is to say, feed your horses in Springtime with soft forrage. And let such forage saith Vegetius be of wheat if it may be gotten: if not, of barly: and it wil be the better, if such forrage be sowen and grow nigh vnto the sea, for that doth lose ẏ bellie, and purgeth soner. Againe, Aristotle saith, that if ẏ forrage of corne be tender and not hard or bearded, it will make a Horses coate to ware smoth & sléke. Moreouer, Vegetius saith in an other place. If your horse be sick or diseased in his bladder, withdraw the his prouender immediatly from him, and féede him onely with gréene grasse or forrage. By all which sentẽces, you may easily perceiue, ẏ forrage is not a mixture of hard corne, but as I sayd before, ẏ soft or gréene blades of wheate or barlie, or any other singular corne. And truely I thinke, that our warriers tearm of forraging, which properly is to get horsemeate abroad in the field, was first derined of this word Farrago, though some would haue forraging to be a word compounded of foris & agens, which indéede is a verie good Etymologie. Notwithstanding, it sheweth not the vse and end of Forraging so wel as this word Farrago doth. And note, ẏ according to Rusius, to purge or scowre a horse, it sufficeth to giue him forrage or grasse onely the space of fiftéene dayes. For to cõtinue any longer time, is to fatte him rather than to purge him. And of all kind of grasse, the thrée leaued grasse of most Authours is most praised. And whilest he is scowred with grasse, Rusius would haue him to stand in the house, and to be couered with a warme woollen cloth. For grasse, saith hee, is naturally colde and moist, and doth coole a Horse marueilously. Moreouer, Theomnestus saith, that if a sicke Horse should be scowred abroad with grasse, it will make him scabby, and the heate of the Sunne will make him to run mad. Notwithstanding, Camerarius would haue a horse, when hée is scowred, to bee put into some close medowe, well fenced with pale or raile, so as hee cannot get out, and there to féed at his owne pleasure: affirming that to be most comfortable vnto the Horse, and to doe him most good. But if such a close

chose place is not to be had, than he would haue the grasse to bee mowne, and to be put in a flat basket before him to feed on in the day time: for in the night season, he would haue no grasse to bee giuē him, but only the fift part of his accustomed prouender, being a litle powdred with salt. It is good also to set salt before him to licke on once or twise a day, or within two or three dayes after he beginneth to fede vpon grasse, it is necessarie to prouoke him to neese, by blowing this neesing powder into his nosthrils: Take of Rosemarie, of Nard, and of Sage, dried and beaten into fine powder, of each like weight. Or if you will, you may vse this receite heere following, prescribed by the auncient writers. Recipe piperis, pulegii, origani, amarici, Costi, Irias, malabatri, radicis cocci, of each like weight: for such neesing doth greatly purge his head. And in most places now adaies, whilest horses are in scowring, they suffer them to stād, & lie in their own dung vp to the hard bellies, thinking that to be a great nourishing vnto them: albeit I see no great reason that can be made for it: for sure am I, that to their bones it doth no good, & to lie moist and wet, must needs be hurtfull to their bodies. Wherfore if they will needes haue them to lie in their dung, I would wish them to follow the turkie vse: which as I haue learned, is to drie their dung in the Sunne euen into powder, and to litter them with that, so shal they lie both warme, soft, & drie. For their dung being made in powder & thicke strewed vnder them, immediately drieth vp all the water that shal passe from them. It is good also according to some, after fiue dayes scowring, in a warme day to wash him in some fresh or salt streame: and being throughly dried, to annoint all his bodie with wine and oile mingled together, and frō thencefoorth to fede him with grasse and prouender so long as shall bee needfull. Some againe, will not scowre their horses with grasse, but with thistles: which the Spaniardes did vse verie much here in England with their Jennets: and no doubt, it scowreth much, but it nourisheth not like vnto our grasse. Some againe scowre their Horses with Pepons and Melons cutte into small peeces, which doe first purge by vrine, and afterward doe fatte. Grapes also and greene Figges, doe purge a Horse, and heale the purliuenesse. But whoso listeth to scowre his

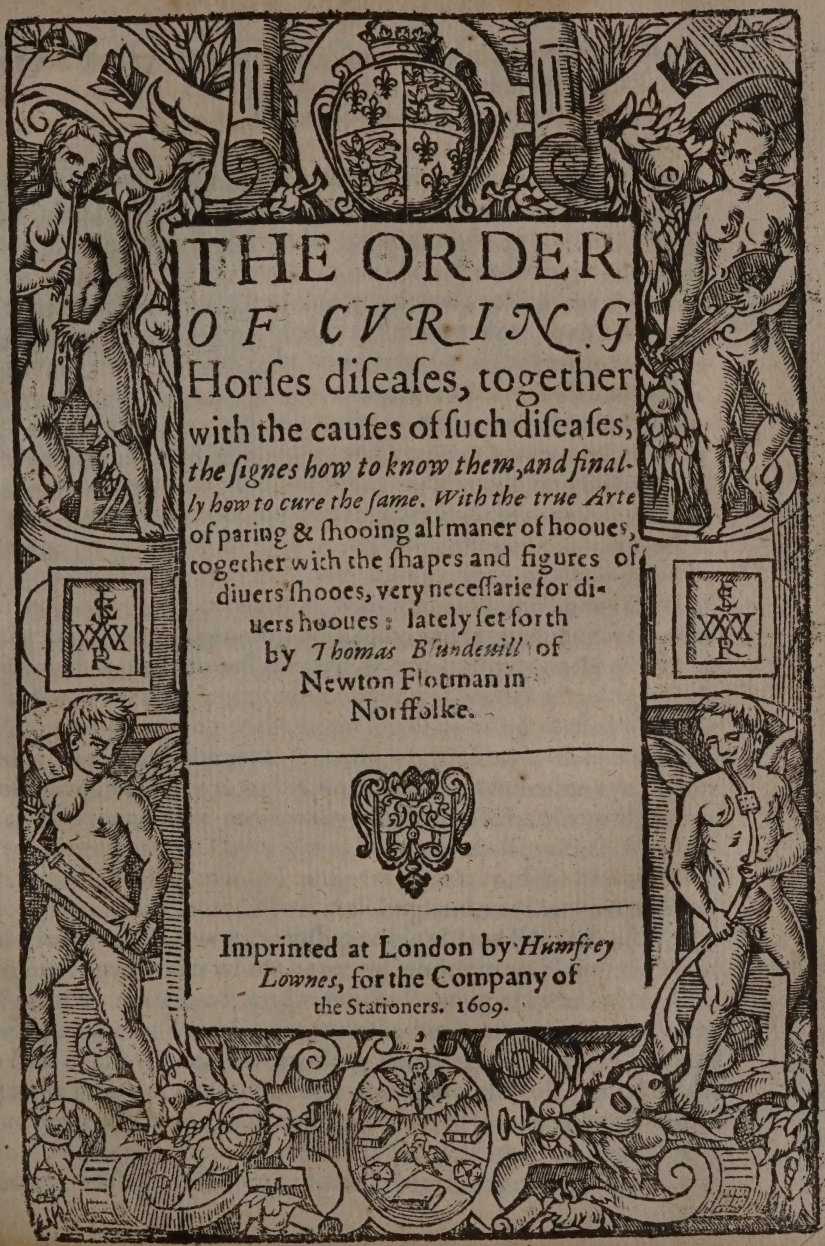
his horse onely, and not to fat him, let him take the intrailes of a Tench or of a Barbell cut into small péeces, and giue them to ỹ horse to drinke in white wine, for that wil purge him as a medicine. Rie also if it be sodden, so as it burst not, and then wel dried and giuen him in stead of prouander, wil not onely purge him, but also kill the wormes of the belly if he eate therof. But if you list to raise a horse sone that is leane, take one parte of sodden beanes wel salted, and foure parts of wheat bran mingled with the decoction of the beanes aforesaid, and giue him that somtime in the manner of a mash, and somtime as his prouender, for that doth fat a horse aboue all thinges. Colewortes also being a little sodden and mingled with wheate bran and a little salt, doth also fat a horse verie sone. Moreouer the fatty decoction of thrée Tortewes being well sodden, their heads, tailes, féete and bones being reiected, both scowreth and fatteth a horse very much. The flesh also of such Tortewes being mingled with their prouãder is good for that purpose. There is also a corne growing hére in England, called branke or bucke, which will raise a horse very sone. Notwithstanding, I would not wish either that, or any other way of such sodaine raising of a horses flesh to be vsed. For such fatnes is but puft vp, & neuer cõtinueth, as is dayly too well proued in such horses or geldings as are bought at horsecourters hands, which most commonly séek rather to pamper their horses for an outward shew, than truly to diet them, to the intent they may make the soner sale of them, and be at no great charge in long kéeping them. Thus much of scouring & fatting of horses.

## Of the affections of a horse, and how the keeper ought to behaue himselfe, that there may be a mutuall loue betwixt the horse and him. Chap. 24.

That there be affections, aswell in a horse as in euerie other beast endued with the soule sensitiue, I am sure no wise man doubteth. For as God gaue to all such beastes the vse of the senses, and the vertue sensitiue, to comprehend thinges offered vnto the senses: so dio he also giue them a naturall instinct or desire, called of the Latines Appetitus sensitiuus, wherby they are moued to loue or to hate, to follow or flie such things as

as they do conceiue, & to reioyce, or to be sorie for the presence or absence of the same. Wherfore al such affects as do belong vnto the power sensitiue, they haue commō with man: as these, loue, hatred, anger, ioy, sorrow, feare, and such like: which affectes, for that they cause many times strange motions in the body, are to be cōsidered aswel of the keeper, as of the Ferrer. And to the intent that the horse be not oppressed with the force of any affection, specially of feare, hatred, or wrath, which be the most perillous effects that can be in a horse, (for as feare causeth the bloud and spirits to resort inward, & to leaue the outward partes destitute of life and feeling: so anger againe, and wrath on ỹ other side causeth him to be vnquiet, fierce and fretting:) the keepers office is to procure the loue of his horse, and to delight him all maner of waies, as well with his voice as doings. For through the currish handling of vnskilfull keepers, many horses are driuen into such feare and desperation, as they become restie, and haue many skittish toies. Some againe are so diuelish for lacke of due correction when need is, as no man may come nigh thē to dresse them. But because few keepers can correct wt discretion, I would wish him rather to vse no correction at al, but onely to winne him by gentle meanes: as by faire speaking, and by often clawing him, and feeding him by hand, & in Summer season, by wiping away flies, motes, or any other thing that doth annoy him: so shall the horse be alwayes glad of him, and reioice in his presence, & in time become so familiar, as hee will play with him like a dog. For truely, vnlesse their be a mutual loue betwixt the keeper and the horse, the horse seldome or neuer battleth. For if the keeper loue not his horse, he wil neuer meat him throughly, nor delight to dresse him, nor the horse will be delighted with his dressing. And therefore the chiefest point of a horse-keeper, is to loue his horse, and to seeke to be loued againe of him: so shal he profite the Horse, and pleasure his maister. And thus I end this.

FINIS.



# THE ORDER OF CVRING

Horſes diſeaſes, together with the cauſes of ſuch diſeaſes, *the ſignes how to know them, and finally how to cure the ſame. With the true Arte* of paring & ſhooing all maner of hooues, together with the ſhapes and figures of diuers ſhooes, very neceſſarie for diuers hooues: lately ſet forth by *Thomas Blundeuill* of Newton Flotman in Norffolke.

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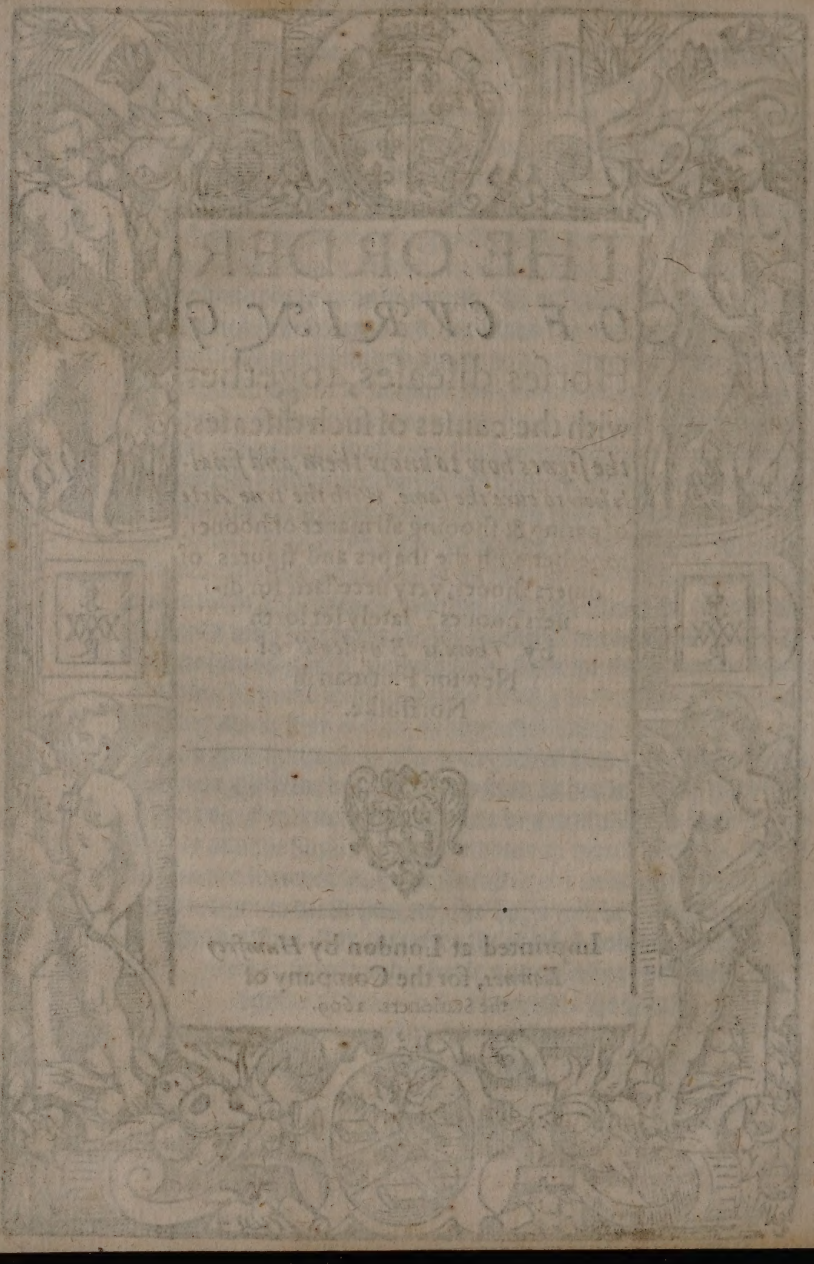

# TO THE GENTLEMEN of England.

ALl horſes for the moſt part do come vnto their decay ſooner than they ſhould do, by one of theſe foure waies: that is to ſay, either for lacke of being well bred, or through the raſhneſſe of the rider, the negligence of the keeper, or elſe through the vnskilfulneſſe of the Ferrer: and therefore hauing heeretofore ſufficiently ſpoken in my other bookes, of breeding, riding, and keeping horſes: this booke ſhal onely treat of the curing of horſes diſeaſes: wherin you haue not onely the good precepts and experiments of al the auncient writers, but alſo the no leſſe aſſured than lately approoued practices of M. *Martin Ghelley* of *Arton*, otherwiſe called *Martin Alman*, chiefe Ferter to the Queenes Maieſtie, with which *Martin* by my Lord of Leiceſters meanes I haue had both often and long conference: and at my Lords earneſt requeſt, the ſayd *Martin* hath not onely conferred with me, and frankly declared his opinion and order of curing al ſuch diſeaſes as he hath delt withall, euer ſince hee firſt profeſſed this arte (which is aboue fortie years) but alſo whileſt I lay with him at S. Albons, made me dayly to ſee his workmanſhip with mine eye, vpon ſuch Horſes as were continually brought vnto him from all quarters to cure: wherein I ſawe him to behaue himſelfe with ſuch iudgement, skil, and diligence, as I cannot chuſe but confeſſe him to be the moſt skilful Ferrer that I know in all England, and that he is nothing inferiour in skill, or workmanſhip, to his old maiſter *Hannibal*, that famous Ferrer, vnder whom he ſerued whileſt king Henry the eight of good memorie liued. And as for the ſhooing of great horſes, I beleeue he farre paſſeth him, yea and all other Ferrers that euer I knew in *Italy* or elſe where. And therefore knowing him ſo much to excell therein, I did not onely diſcourſe with him at the full, touching the true order of paring and ſhooing al maner of hooues: but alſo cauſed him to make me certaine paternes of diuerſe ſhooes to ſerue diuerſe hooues, the ſhapes whereof you haue hereafter preſented ſo nigh as

may

may be, together with my whole discourse briefly told touching the same. Wherein I vsed the more diligence, because I my selfe haue seen diuerse trim horses, hauing naturally of themselues verie perfect hooues, that by meanes of vnskilfull Ferrers, (not knowing how to pare the hooue, and to fashiō the shooe, so as it ought to be) to fit the foote, haue had in verie short space as weak and euill hooues as was possible. Whereas contrariwise a skilfull Ferrer by Art and diligēce, can quickly make a weake hoo'e strong. Which Art is here so plainly taught, as everie plaine smith, if he will apply his minde thereunto, may soone learne the same to his owne praise, and the great benefite of you Gentlemen that delight to keepe good horses, & to haue thē well shod; and the rather through your good instructions, after that you haue once read and well considered this booke: for I am sure that few or none of the country smithes can read. There resteth therfore now, nothing more for me to say, but that as this book is chiefly for your benefite, so it may please you, first to bee thankefull to my good Lord of Leicester for first procuring the same, and secondly to *Martin* for his knowledge vttered therin: For as for mine own part, being a poore Gentleman my selfe, I thinke my selfe bound to gratifie all honest Gentlemen, and to serue my Countrey by all such meanes as I possibly can, without looking for any thanks at all: assuring my selfe that how small soeuer my desert be, you will accept my good will in good part.

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FINIS.

# Of things against nature, what and which they be.

*The first Chapter.*

Hauing hitherto sufficiently spoken as wel of things naturall, whereof the horse is compounded, as also of things not naturall, wherby he is nourished, & maintained in healthy: and therein briefly touched all the particular parts and members belonging to ỹ office of the keeper: it is now requisite that we speak of the things against nature, the knowledge whereof, most chiefly appertaineth to the office of the Ferrer. Things against nature be those wherby the healthfull state of the beast his body doth decay: & such thinges according to the learned Physicians be in number three. That is to say, ỹ cause, the sickenesse, and accidents following sicknes, which accidents are called of the Latines by the Greeke name Symptomata: whereof I purpose not here to make any speciall treatie, but to mingle them together with the diseases, according as all mine Authors haue done before me.

Of causes and kindes thereof. Chap. 2.

The causes of sickenesse be vnnaturall affects, or euill dispositions precéding sickenesse, and prouoking the same, which of themselues doe not hinder the actions of the bodie, but by meanes of sickenesse comming betwixt. Of causes, some bee called internall, and some externall. Internall bee be those that brééd within the bodie of ỹ beast, as euill iuice. External be those that chance outwardly to the body, as heat, cold,

or the stinging of a serpent, & such like. In knowing the cause of euerie disease, consisteth ỹ chiefe skill of the Ferrer. For vnlesse he knoweth ỹ cause of the disease, it is vnpossible for him to cure it well and skilfully. And therefore I wish all Ferrers, to be diligent, in seeking to know the causes of al diseases, as wel in the parts similar, as instrumental, and to know whether such causes be simple, or compound: for as they be simple or compound, so doe they ingender simple or compound diseases.

Of sickenesse what it is, and how many generall kinds there be, also with what order the diseases of horses are in this booke declared. And finally, of the foure times belonging to euerie sickenesse. Chap. 3.

SIckenes is an euill affect contrary to nature, hindering, of it selfe, some action of the bodie. Of sickenesse there bee three generall kindes, whereof the first consisteth in the parts similar: the second in the partes instrumentall: and the third in both parts together. The first kind, is called of the Latines Intemperies, that is to say, euill temperature, which is either simple or compound. It is simple, when one qualitie onelie doth abounde or excede too much, as to be too hot, or too colde. It is compound, as when many qualities doe excede, as when the body is too hotte and too drie, or too colde and too moist. The second kind is called Mala constitutio, that is to say, an euill state or composition: which is to bee considered, either by the shape, number, quantity, or site of the member, or parte euill affected and diseased. The third kinde is called Vnitatis solutio, that is to say, the losening or diuision of the vnitie, which as it may chance diuerslie, so it hath diuers names accordingly: for if such solution, or diuision be in a bone, then is it called a fracture: if it be in any fleshie parte, then is it called a wounde or vlcer, in the veines a rupture, in the sinewes a conuulsion or crampe, and in the skin an excoriation. Againe, of diseases some be called long, and some sharpe and short, called of the Latines, Morbi acuti, which be perillous, and do quickly kill the bodie. The long, doe tarrie longer by it. Yet moreouer, there is sickenesse by it selfe, and sickenesse by consent. Sickenesse by it selfe, is that which being

ing in some member, hindereth the action thereof by it selfe. Sicknes by cõsent, is deriued out of one member into another, through the neighbourhood and communitie that is betwixt thẽ: as the paine of the head which cõmeth from the stomach. Thus the learned Physicians which write of mans body, do diuide sicknes. But Absirtus writting of horseleach craft, saith that of sicknesse or rather maladie (for so he tearmeth it, vsing that word as a generall name to all maner of diseases that be in a horse) there be foure kinds: that is to say, the moist maladie, the drie malady, the malady of the ioyntes, and the malady betwixt the flesh and the skinne. The moist malady is that which wee call the Glanders. The drie maladie is an incurable consumption, which some perhaps would call the mourning of the cheine, but not rightly, as shall well appeare vnto you hereafter. The maladie of the ioints comprehendeth all griefes and sorances that be in the ioints. And the maladie betwixt the flesh and the skinne, is that which we call the scabbe: vnto which foure kindes of maladies, Vegetius addeth three others, that is, the Farcine, the paine of the reines or kidneies, & the cankred mangineſſe, most commonly called of the olde writers the leprosie, and so maketh seuen kinds of maladies, vnder which al other particular diseases are comprehended.

Againe, Laurentius Rusius, vseth another kind of diuision of sicknesse. Of horses diseases (saith he) some be natural, and some accidentall. The natural be those that doe come either through the excesse, or lacke, of engendring seede, or by error of nature, in misforming the young, or else by some defect of the damme, or sire, in that perhappes they bee diseased within, and haue their seede corrupted. The accidentall diseases be those, that come by chance, as by surfetting of cold, heate and such like thing. But forsomuch as none of these writers doe follow their owne diuisions nor handle the parts thereof accordingly: to auoide their confusion, and to teach plainly, I thought good therefore to vse this my own diuision & order heere following. First then, of diseases some bee inward, and some bee outwarde. The inwarde bee those that breed within the horses bodie, and are properlie called maladies or diseases, whereof some doe occupie all the

whole body, and some particular parts or members of the body, Of those then that occupie al the body, and be not incident to any priuate member, I do first treate, as of Agues, of the Pestilence, and such like, and then of those that be incident to euerie particular member, beginning at the head, and so proceede orderly throughout all the members, euen downe to the sole of the foote, obseruing therein so nigh as I can, the selfe same order that Galen vseth in his booke, De locis male affectis, declaring first, what manner of disease it is, and how it is called in English, and also in Italian, because the Quenes stable is neuer without Italian riders, of whome our Ferrers also haue borrowed manie names, as you shall perceiue hereafter. Then, ye causes wherof it procedes, and the signes how to know it, and finally, the cure and diet belonging to the same. And because I finde not inward diseases enow to answere euerie part of the body, I do not let to interlace them with outward diseases incident to those partes: yea rather, I leaue out no outward disease, belonging to any particular member, to the intent you may the better knowe, to what diseases or sorrances euerie part or member of the horses bodie, is most commonly subiect. And note by the way, that I call those outwarde diseases that procede not of any inwarde cause, but of some outward cause, as when a horse is shouldered by meanes of some outward cause, or his backe galled with the saddle, or his sides spurgalled, or his hoofe cloid with a naile, and such like, which properly may be called sorrances or griefs. Thirdly, I talke of those diseases as wel outward as inward, that may indifferently chance in any part of the body, as of Impostumes cankerous vlcers, wounds, fistules, burnings, bruisings, breaking of bones, and such like. Fourthly, because most diseases are healed either by letting of blood, by taking vp of veines, by purgation, or else be cauterisation, that is to say, be giuing the fire: I talke of those foure necessary things seuerally by themselues. & finally, I shew you the true order of paring and shoing al maner of houes, according as the diuersity of houes require: & to the intent you may the better vnderstand me, you haue ye perfect shapes of al necessarie shoes, plainly set forth in figures before your eies. Thus much touching my order obserued in this book.

Now

Now it is necessarie to knowe, that to euerie disease or malady, belongeth foure seuerall times, that is to say, the beginning, the increasing, the state, and declination, which times are diligētly to be obserued of ỳ ferrer, because they require diuers applying of medicine: for that medicine which was mēt to be vsed in the beginning of the disease, perhaps is not to be vsed, in the declination thereof: and that which is requisite, and very nēdfull, to bee applied in the state, or chiefest of the disease, may perhaps be verie dangerous to be vsed in the beginning. And therfore the ferrer ought to bee a man of iudgement, and able to discerne one time from another, to the intent hee may apply his medicines rightly. Hitherto of causes and sicknesse in generall. Now it is also mēt, that we speake in general of signes, whereby sicknes is knowne.

Of the signes of sickenesse in generall. Chap. 4.

SIckenesse according to the learned Physicians, is knowne foure manner of wayes: first by inseparable or substantiall accidents, as by ỳ shape, number, quantitie, and site of ỳ part, or member diseased. For if it be otherwise formed, or more or lesse in number or quantitie, or else otherwise placed than it ought to bee, then it is not well. Secondly, sickenesse is known by alteration of the quality, as if it be too hot, or too cold, too moist or too drie. Thirdly, when the action of any member is hurt or letted, as when the eyesight is not perfect it is a manifest signe, that the eye is euill affected or sicke. Likewise, when there brēdeth no good blood in the body, it is an euident token, that the liuer is not well. Fourthly, sickenesse is knowne by the excrements, that come from the beast, as by dung or stale: for if his dung be too strong of sent, ful of whole cornes, or of wormes, too hard, or too soft, or euill coloured, it is a token that he is not wel in his body: so likewise if his stale be too thicke, or too thin, too white or too red, it betokeneth some surfett, raw digestion, or else some griefe in his reines, bladder or stones. But Vegetius saith, that it is best knowne, whether a horse be sicke or not, or toward sickenesse, by these signes here following: for if he be more slowe, and heauy in his trotting, or gallopping, harder of spurre, than hee

was

was wont to be, or spreadeth his litter abroad with his feete, often tumbling in the night season, fetching his breath short, & violently, lowd snuffling in the nose, and casting out hot vapors at his nostrils, or lyeth downe immediatly after his prouender, or maketh long draughtes in his drinking, or in the night season, is now downe, and now suddenly on foot: or if in the next morning, he be very hote in his passornes, or betwixt his eares, or that his eares hang more than they are wont to do: again, if his eyesight be dimme, and his eies hollowe in his head, his haires standing right vp, and his flanks hollow and empty, whensoeuer two or three of these signes do concur together, then it is to be thought, saith Vegetius, that the horse is not well, and therefore he would haue him immediatly to be separated from his companiõs, that be whole, and to be placed by himself, vntill his disease be perfectly knowne and cured, and specially if it bee any contagious disease. I haue seene diuers Ferrers heere in England to vse ỹ for the triall of a horses sickenes, which I neuer read in any Author, that is, to feele his stones, whether they bee hote or colde, & to smel at his nostrils, and so by the sauour therof to iudge what sickneſſe the horse hath. Truely, I thinke that no euill way, if they can discerne with their sense of smelling, the diuersitie of sauours, that commeth out of his nostrils, and then aptly apply the same to the humours, whereof such sauours be bred, & so orderly to seeke out the originall cause of his sickneſſe. But I fear me, that more Ferrers smell without iudgement, thã with such iudgement: and no maruel why, sith that few or none be learned or haue bẽn brought vp with skilful maisters. But from henceforth I trust that this my trauel, will cause such Ferrers as can read, and haue some vnderstanding alreadie, to be more diligẽt in seeking after knowledge, than they haue heene heeretofore, whereby they shall be the better able to serue their country, and also to profite themselues, with good fame: whereas now for lacke of knowledge they incurre much slaunder.

## Of the Feuer and diuers kinds thereof in a horse.

### Chap. 5.

I Thinke it will seeme verie strange vnto some, to heare that a Horse should haue an Ague, or Feuer: but it was not strange

vnto

vnto ỹ men of old time, as to Absirtus, Hierocles, Xenophon, Vegetius, & such like old souldiors, throughly experimented in horses grieses. A Feuer, according to the learned Physicias, is an vnnatural and immoderate heat, which procéding first from the heart, spreadeth it selfe throughout all the artires and veines of the body, and so letteth the actions thereof.

Of Feuers there be thrée generall kindes, whereof the first, is that which brédeth in ỹ spirits, being inflamed or heated more than their nature requireth. The second brédeth in the humors being also distempered by heat. The third in the firme partes of the bodie, being continually hotte. What spirites, and humors bee, hath béene tolde you before in the keepers office. Of these thrée generall kindes do spring many other speciall kinds, as Quotidiãs, Tertians, Quartanes, Feauers Hectique, and very many others, whereunto mans body is subiect, whereof none of my Authours do treate, vnlesse it be Vegetius, who speaketh somewhat of a Feauer Quotidian, of a Feuer continuall, and also of a Feauer accidentall. He speaketh also of Summer, Autumne, & Winter Feauers, without making any great difference betwixt them, more than that one is worse than another by reason of the time and season of the yeare: so that in effect al is but one Feauer. Wherefore according vnto Absirtus opinion, I will briefly shewe you first the causes whereof it proceedes, and then the signes how to know it, and finally how to cure the same.

The Feuer chanceth sometime by surfetting of extream labor or exercise, as of too much trauelling, & specially in hot weather, of too swift galloping & running, and somtime by extream heat of the Sunne, and also by extream cold of the aire, and somtime it brédeth of crudities or raw digestion, which many times happeneth by ouergrédy eating of swéet grene corne, or of such prouender as was not throughly dried nor cleansed: for after such grédy eating, and specially of such meates, never followeth perfect digestion. The signes to knowe a Feuer bee these: The horse doth continually hold downe his head, and is not able to lift it vppe, his eyes are blowen so as hee cannot easily open them: yea, and many times they bee watering: the flesh of his

his lippes and of all his bodie is lush and feeble, his stones hang low, his body is hot, and his breath is also verie hot and strong, he standeth weakly on his legges, and in his going draweth the lazily after him, yea, he cannot go but very softly, and that staggering here and there, he will lie down on his side, and is not able to turne himselfe, or to wallow: he forsaketh his meat, both haie and prouender, and is desirous of nothing but of drinke, which as Absirtus saith is an assured token of a Feuer: he also sleepeth but little. The cure and diet. Let him bloud in the face and temples, and also in the palat of his mouth, and the first day giue him no meate, but onely warme drinke, and that by little and little. Afterward giue him continually grasse, or else very sweete haie wet in water, and let him be kept warme, and sometime walke him vp and downe faire and softly, in a temperate aire, and then let him rest, and when you see that he begins to amend, giue him by little at once barlie faire sifted, and wel sodden, and also mundified, that is to say, the huske pulled away, like as when you blanch Almonds.

## Of diuers sorts of Feuers, according to *Vegetius*, and first of that which continueth but one day. Chap. 6.

The Feuer of one day called by the Greeke name Ephemera, or else by the Latine name Diaria, chanceth many times, through the rashnesse, and small discretion of the keeper, or some other that letteth not to ride a horse vnmeasurably, either before or after watering, whereby the horse afterward in the stable entereth into an extreame heat, and so falleth into his Feuer: which you shall know partly, by his watrish and bloudshotten eies, and partly, by his short, violent, and hot breathing, and panting. Moreouer, he wil forsake his meat, and his legges will ware stiffe and feeble. The cure. Let him haue rest all the next day following, & be comforted with warme meat, then let him be walked vp and downe faire and softly, and so by little and little brought againe to his former estate.

Of

## Of the Feuer continuall. Chap. 7.

The Feuer continuall, is that which continueth without intermission, and is called in Italian by the Latine name Febris continua, which springeth of some inflammation, or extreame heat, bred in the principall members, or inward parts about the heart, which is knowne in this sorte. The horse doth not take his accustomed rest, whereby his flesh doth fall away, euerie day more & more, and sometime there doth appeare hot inflammations in his flanks, and about his withers. The cure. Purge his head by squirting into his nostrels mans vrine, or the water of an Ore, that hath bene rested a certain time, to the intent such water may be the stronger, and then giue him ỹ drink written in the next chapter.

## Of the Feuer taken in Autumne, that is to say, at the fall of the leafe. Chap. 8.

If a Horse chance to get a Feuer at the fall of the leafe, cause him immediatly to be let bloud, in the necke veine, and also in the third forrow of the rose of his mouth, and then giue him this drinke. Take of Iermander, foure ounces of Cumme dragãt, and of dried Roses, of ech one ounce, beat them al into fine powder, and put them into a quart of ale, adding thereunto of oile Oliue foure ounces, and of Hony as much, and giue it the horse luke warme.

## Of the Feuer in Summer season. Chap. 9.

A Feuer taken in Summer season is much worse, than in any other time, and specially if it bee taken in the dogge dayes, for then the accidents be more furious. The signes bee these: his arteres will beat euidently, and hee wil shed his séede when hee staleth, and his going will bee vnorderly. The cure. Let him bloud in a veine that he hath in his hinder hanch about foure fingers beneath the fundament, or if you cannot find that veine, let him bloud in the necke veine, toward the withers, and if it be néedfull you may giue him also this drinke. Take the iuice of a handfull of Parsley mingled with Gum dragant, with Ensens, and a fewe Damaske Roses, beaten all into fine powder,

powder, and then put therunto a sufficient quantitie of ale made swéet with Hony.

## Of the Feuer in winter. Chap. 10.

FOr the Feuer in Winter, it shall bee good to take the powder of the drugges last mentioned, and with a quill or réed, to blowe it vp into his left nostrill to make him to néese. It shall bee good also to let him bloud in the necke veine, and in the palat of the mouth, and then to giue him one of these drinks héere following. Take of Ireos six ounces, of round pepper one ounce, of Bate beries, and of the séed of Smallage, of ech one ounce, & let him drinke them with sodden wine. Or else take a pint of good milke, and put therein of Oyle foure ounces, of Saffron one scruple, of Myrrhe two scruples, of the séed of Smallage a spoonefull, and make him drinke that: or make him this drinke. Take of Aristoloch, otherwise called round Hartwood one ounce, of Gentian, of Isop, of wormwood, of Sothernwort, of each one ounce, of drie fatte Figges fiue ounces, of the séede of Smallage, three ounces, of Rew a handfull, boile them all in a cleane vessell with riuer water, vntill the thirde part bee consumed, and when you sée it loke blacke and thicke, take it from the fire, straine it, and giue the horse to drinke thereof lukewarme. As touching his diet, let his water bee alwayes lukewarme, wherein would be put a little wheat meale, and remember to giue him no meat, so long as his fitte continueth. And because in all Agues it is good to quicken the naturall heat of the horse, by rubbing and fretting his bodie, it shall not be amisse in some faire day to vse this friction, called of the auncient writers Aporerapie, which is made in this sort. Take of Damaske roses one pound, of olde oile a pinte, of strong vinegar a pinte and a halfe, of Mintes and Rew beaten into powder, of ech one ounce and a halfe, together with one old drie Nutte, beate them & mingle them together, then being strained & made lukewarme, rub and chafe all the horses body therewith against the haire, vntill he beginneth to sweate, then set him vp in the warmest place of the stable, and couer him well.

## Of the Feuer which commeth of raw digestion or of repletion. Chap. 11.

YOu shal know if the Feuer procédeth of any such cause, by these signes heere following. The horse will blow at the nose more than he is accustomed to doe, séeming to fetch his winde only at his nose, and his breath will bee short, hot and drie, you shall sée his flanks walke, and his backe to beat. The cure. Cause him to be let blood aboundantly in the head, and palat of his mouth, and by squirting warm vineger in the morning into his nostrils, force him to néeze: and if he bee costiue, let his fundament be raked, or else giue him a glister, to ease the pain in his head. And as touching his diet, giue him but little prouēder, or hay, neither let him drink much nor often, but betwixt times. But in any wise let him be well rubbed, and chafed, & that a good while together: and if you vse the friction declared in ỹ last chapter before, in such sort as there is sayd, it shal doe him very much good.

## Of the Feuer accidentall comming of some Vlcer in the mouth or throte. Chap. 12.

THe horse not being well kept and gouerned, after that hee hath beene let blood in the vpper partes (yea, & also besides that, of his owne nature) is subiect vnto the distillation in his throate, or partes thereabout, the painefull swelling or vlcer whereof causeth the horse to fall into a greeuous Ague. Wherfore besides the former remedies apt to purge humors, it shall be necessarie also, to let him blood in the veine of the head, and in the palat of his mouth, and to be short, in al those places where the disease causeth most gréefe. And if the horse be so sore pained, as he cannot swallow downe his meat, it shal be good to giue him luke warm water, mingled with barly meale, or wheate meale, and besides that, to make him swallowe down seuen sops sopped in Wine one after another, at one time: some vse at the second time, to dip such sops in swéet sallet oile. Thus farre Vegetius.

OF

## Of the pestilent ague. Chap. 13.

IT seemeth by Laurentius Rusius, that horses be also subiect to a pestilent feuer, which is almost vncureable, called of him Infirmitas Epidimialis, that is to say, a contagious and pestiferous disease, whereof there died in one year in Rome aboue a thousand horses: which as I take it, came by some corruption of the aire, whereunto Rome in the cheefe of summer is much subiect; or else of corrupt humors in the bodie, ingendred of vnkind fode, by reason perhaps, that the citie was then pestered with more horsemen, then there could be conuentently harbored or fedde. Laurentius himselfe rendreth no cause thereof, but only sheweth signes how to know it, which be these. The horse holdeth down his head, eateth little or nothing, his eies be waterish, & his flanks doe continually beat. The cure. First giue him this glister. Take of the pulpe of Coloquintida, one ounce, of Dragantum one ounce and a halfe, of Centuarie and Wormwood of each one handful, of Castoreum halfe an ounce, boile them in water: then being strained, dissolue therein, of Gerologundinum six ounces, of salt an ounce and a halfe, and halfe a pound of oile Oliue, and minister it luke warme with a horne or pipe made of purpose. Make also this plaister for his head: take of Squilla fiue ounces, of Elder, of Castoreum, of mustard seed and of Euforbium, of each two ounces, dissolue the same in the iuice of Daffadill, and of Sage, and lay it to the temples of his head next vnto his ears, or els giue him any of these three drinks here following: take of the best triacle two or three ounces, and dissemper it in good wine, and giue it him with a horne, or else let him drinke euery morning the space of three dayes, one pound or two of the iuice of Elder rootes, or else giue him euerie morning to eate, a good quantitie of Venus haire, called of the Latines, Capillus Veneris, newly and freshly gathered: but if it bee old then boyle it in water, and giue him the decoction thereof to drinke with a horne.

## Martins *opinion and experience touching a Horses Feuer. Chap.* 14.

THough Martin haue not seene so many seuerall kinds of Feuers to chance to Horses, yet he confesseth that a Horse will haue

haue a Feuer, and sayth that you shall know it by these signes. For after the horse hath bẽn sicke two or thrée dayes, if you lok on his tongue, you shall sée it almost raw and scalte, with ẏ heat that comes out of his body, and he will shake and tremble, rẽle and stagger when his fit commeth, which fit wil kẽp his due howers, both of comming & also of continuãce, vnlesse you preuent it by putting the horse into a heat: which would be done so sone as you sée him begin to tremble, either by riding him, or tying vp his legs, and by chasing him vp and down in the stable, vntil hee leaue shaking, and then let him be kept warme, and stand on the bitte the space of two houres: that done, you may giue him som haie, by a little at once, and giue him warme water, with a little ground mault twise a day, the space of thrée or foure dayes, and once a day wash his tongue with Alom water, Vineger, & sage. But if you sée that all this preuailes not, then purge him wt this drinke, after that he hath fasted al one night. Take of Aloes one ounce, of Agaricke halfe an ounce, of Licoras and Annis sẽdes of each a dramme, beaten to powder, and let him drink it with a quart of white wine luke warme, and made swẽte with a little hony, in the morning fasting, and let him be chased a little after it, and be kept warme, and suffered to stand on the bit meatlesse two or three houres after, and hee shal recouer his health againe quickely.

## Of the Pestilence. Chap. 15.

The Pestilence is a contagious disease, procẽding as Pelagonius sayeth, sometime of ouer much labour, heate, cold, or hunger, and sometime of sudden running after long rest, or of the retention or holding of stale or vrine, or of drinking cold water whiles the horse is hotte and sweating, for all these things doe brẽde corrupt humours in the horses body, whereof the Pestilence doth chiefly procede, or else of the corruption of the aire, poysoning the breath, whereby the beastes should liue, which also happeneth somtime of the corruption of euill vapours and exhalations that spring out of the earth, and after great flouds or earthquakes, and sometime by meanes of

some euil distillation or influence of the Planets, corrupting sometime the plantes and fruits of the earth, sometime diuers kind of cattell, and sometime both men, women and children, as we dayly see by experience. It seemeth that this euil or mischiefe in times past came suddenly, without giuing any warning, for none of my Authors doth declare any signes how to know whether a horse hath this disease or not, but onely affirme, that if one horse doe die of it, all his fellowes that beare him companie will followe after, if they be not remedied in time: so that as farre as I can learne, the sudden death of one or two first must be the only meane to know that this disease doth reigne. And the remedy that they giue is this. First separate the whole from the sick: yea, and haue them cleane out of the aire of those that be dead: bodies whereof as Vegecius sayth, if they be not deep buried, will infect all the rest. And let them blood as well in the necke, as in the mouth, and then giue them this drinke: Take of Gentian, of Aristoloch, of Bay berries, of Mirre, of the scraping of Iuorie, of each like quantitie, beat them into fine powder, and giue as wel to the sicke as to the whole, whom you would preserue from this contagion, euerie day a spoonful or two of this powder in a pint of good wine, so long as you shall see it needfull. This medicine before rehearsed, is called of the ancient writers Diapente, that is to say: a composition of fiue simples, and is praised to be a soueraigne medicine and preseruatiue against all inward diseases: and therefore they would haue such as trauel by the way, to carry of this powder alwaies about them. There bee many other medicines which I leaue to write, because if I should rehearse euerie mans medicine, my booke would be infinite. I for my part would vse no other than either that before expressed, or else wine and triacle onely.

## Of the diseases in the head. Chap. xvi.

THe head is subiect to diuers diseases according to the diuers partes thereof: for in the pannicles, or little fine skins cleauing to the bones, and couering the braine, doo most properly breed headach, and megrim. Againe in

in the substance of the braine, (which in a horse is very little or none) do breed the Frensie, madnesse, sleeping euill, the taking, & forgetfulnesse. Finally, in the ventricles or celles of the brain, and in those conduits through which the spirits animal doo giue feeling, and moning to the body, do breed the turnesicke, or staggers, the falling euil, the night mare, the Apoplexie, the Palse, and the conuulsion or crampe, the Catarrhe or Rheume, which in a horse is called the Glanders, but first of headach.

## Of Headach. Chap. 17.

The headach, either commeth of some inward cause: as of some cholericke humour, bred in the pannicles of the braine, or else of some outward cause, as of extreame heate or cold, of some blowe, or of some violent sauour. Eumelus saith, that it commeth of raw digestion: but Martin sayth most commonly of cold: the signes be these. The horse wil hang down his head: and also hang downe his eares; his sight wil be dimme, his eies swollen and watersh: and he wil forsake his meate. The cure. Let him bloud in the palat of his mouth. Also purge his head with this perfume. Take of Garlike stalks a handful, al to broken in short peces and a good quantitie of Frankencense, & being put into a chasingdish of freshe coles, hold the chasingdish vnder the horses nostrils, so as the fume may ascend vp into his head: and in doing him thus once or twise, it will make him to cast at the nose, & so purge his head of all filth. Pelagonius saith that it is good to powre out into his nostrils, wine wherein hath beene sodden Euforbium, Centory and Frankincense.

## Of the frenzie and madnesse of a Horse. Chap. 18.

The learned Phisicians doe make diuers kindes, as well of Frensie, as of madnesse: which are not needfull to bee recited, sith I could neuer read in any Authour, nor learne of any Ferrer: that a horse were subiect to the one halfe of them. Absirtus, Hierocles, Eumelus, Pelagonius, and Hippocrates, doe write simply de furore & rabie: that is to say: of the madnesse of a horse. But indeede Vegetius in his second book of horseleachcraft, seemeth to make foure mad passions be-

longing to a Horse, intituling his chapters in this sort, de Appiosо, de Phrenetico, de Cardiacis, de Rabiosо, the effects whereof though I feare me it will be to no great purpose, yet to content such as perhaps haue read the Authour as well as I my selfe: I will here briefly rehearse the same. When some naughty bloud (sayth he) doth strike the filme or pannicle of the braine, in one part only, and maketh the same grieuously to ake, then the beast becommeth Appiosum, that is to say, as it seemeth by his owne words next following, both dull of mind and of sight. This word Appiosum, is a strange word, and not to be found againe in any other Authour. And because in this passion, the one side of the head is only greeued, the horse turneth round, as though he went in a Pill. But when the poyson of such corrupt bloud doth infect the mid braine, then the Horse becommeth Frentike, and will leape and fling, and runne against the walles. And if such bloud fillech the veines of the stomach, or breast, then it infecteth as well the heart, as the braine, and causeth alienation of mind, and the body to sweat: and this disease is called of Vegetius, Passio cardiaca, which if Equus Appiosus chance to haue, then he becõmeth Rabiosus, that is to say, starke mad. For (saith he) by ouermuch heate of the Liuer, and of bloud, the veines and artires of the heart are choaked vp, for griefe and paine whereof the horse bit eth himself, and gnaweth his owne flesh. Thus far Vegetius. Of two sorts of mad horses (I beleeue) I haue seene my selfe heere in this Realm. For I saw once a black Sweathland horse (as I took him to be) in my Lord of Hunnisdons stable at Hunnisdon, cõming thither by chance with my Lord Morley, which Horse would stand all day long biting of the manger, and eate little meate or none, suffering no man to approach vnto him: by which his doings, and partly by his colour and complexion, I iudged him to bee vexed with a melancholy madnesse, called of the Physicians, Mania, or rather Melancholia, which cõmeth of a corrupt Melancholy, a filthy bloud or humor, sometime spread thoughout all the veines of the body, and sometimes perhappes remaining onely in the head, or else in the splene, or places next thereunto adioyning. The other madde horse was a Roane of Maister Achleis, maister of the Iewell house, which with his

teeth

teeth crushed his maisters right forefinger in péeces, whilest hee offered him a little haie to eate, wherby he lost in a maner the vse of his whole hand, to the great griefe of al his friends, and allook all the Muses, which were wont to be much delighted with such passing swéete musicke as that his fine quauering hand could sometime make vpon diuers instrumentes, but specially vpon the virginals. This horse I say though he could eate his meate, drinke his drinke, and slépe: yet if he were neuer so little offended, he would take on like a spirit, and both bite and strike at any man that came nigh him: yea and would bite himselfe by the shoulders most terribly, pulling away lumpes of flesh, so broad as a mans hand: and whensoeuer he was ridden, he was faine to be musled with a musell of iron, made of purpose to kéepe him from biting either of his rider or himself: which no doubt proceeded of some kinde of frenzie or madnesse, whereunto the horse was subiect, by meanes that hotte bloud (as I take it) abounded ouermuch in him. But now as touching the causes, signes, and cure of a horses madnesse, you shall heare the opinion of old writers: for Martin neuer toke such cure in hand. Absirtus, and the other Authors before mentioned say, that the madnesse of a horse commeth either by meanes of some extreame heat, taken by trauelling, or long standing in the hot sunne, or else by eating ouer many fitches, or by some hotte bloud reso rting to the pannicles of the braine, or through abundance of choler, remaining in the veines, or else by drinking of som very vnwholsom water. The signes be these, he wil bite the manger, and his owne bodie, and runne vpon euery man that comes nigh him, he will continually shake his eares, and stare with his eies, foame at the mouth, and also as Hyppocrates saith, he wil forsake his meat and pine himselfe with hunger. The cure. Cause him to bee let bloud in his legges aboundantly, which is done (as I take it) to conuert the bloud from his head. Notwithstanding it were not amisse, to let him bloud in the necke and breast veines. Then giue him this drinke: take the rote of wilde Cucumber, and boyle it in harsh redde wine, and put thereunto a little Nitre, and giue it him with a horne lukewarme: or if you can get no Cucumber, then take Rewe, and Mintes, and boile them in the Wine. It

were not amisse also, to adde thereunto a handful of black Elleborus, for that is a very good heade against madnesse. Eumelius saith, that if you giue him mans dung in wine to drinke three mornings together, it will heale him: also to take of black Elleborus, two or three handfuls, & boile it in a sufficient quãtity of strong Vinegar, and therewith rub and chafe both his head, & all his bodie once or twise in a day, for the oftener his head is rubbed the better, and often exercise is very profitable to all his bodie. Some againe would haue the skin of his head to be pearced in diuers places with a hot iron, to let out the euill humors: but if none of all these will preuaile, then the last remedie is to gelde him of both his stones, or else of one at ỳ least, for either that will heale him or else nothing. As touching the diet and vsage of a mad horse, the Authors doe not agrée: for some would haue him kept in a close, darke and quiet house, voide from all noise, which as Absirtus saith, will either make him madder, or else kill him out of hand. His diet would be thin: that is to say, without any prouender, & that day that he is let bloud, and receiueth his drink, they would haue him to fast vntill euen, & then to haue a warme mash of Barlie meale: yea, me thinks it were not amisse to fed him onely with warme mashes and haie, and that by a little at once vntill he be somewhat recouered.

## Of the sleeping euill. Chap. 19.

THis is a disease forcing the beast continually to sleepe, whether he will or not, taking his memorie and appetite cleane away, and therefore is called of Physicians Lethargus: it procedeth of abundance of fleame moistning the braine ouermuch. It is easie to knowe, by the continuall sléeping of the horse. The cure of this disease according to Pelagonius, Vegetius, and others, is in this sort. Let him bloud in the necke, and then giue him this drinke: take of Camomill and Motherwort, of each two or three handfuls, and boyle them in a sufficient quantitie of water, and put thereunto a little wheate branne, salt, and vineger, and let him drink a pinte of that euery day, the space of three or foure dayes together. It is good also to

perfume

perfume and chafe his head, with Time, and Pennyroyal sodden together in vinegar, or with Brimstone and feathers burned vpon a chafingdish of coles vnder his nose, and to prouoke him to neese, by blowing pepper and Pyrechrũ, beaten to powder, vp into his nostrils: yea, and to annoint the palat of his mouth, with Honie and mustard mingled together: and in his drinke, which would be alwaies warme water, to put Parsly seede, and Fenel seede, to prouoke vrine. His legges also wold be bathed, and his howes filled with wheat braune, salt, and vineger, sodden together, and laid to, so hot as he may endure it, and in any case suffer him not to sleepe, but kéep him waking and stirring, by continuall crying vnto him, or pricking him with some sharp thing that cannot passe cleane through the skinne, or else by beating him with a whip, and this doing he shal recouer.

## Of a horse that is taken. Chap. 20.

A Horse is sayd to be taken, when hee is depriued of his feeling, and moning, so as hee is able to stirre no manner of way, but remaineth in such state and forme, as he was taken in. Which disease is called of the Physicians by the Greeke name Catalepsis, and in Latin Deprehensio, or Congelatio, and of Vegetius, Sideratio, which also calleth those beastes that haue this disease Iumenta sideratitia. The Physicians say, that it cõmeth of abundãce of Phlegme, and choler mixt together, or else of Melancholy blood, which is a colde drie humour oppressing ỳ hinder parts of the braine. But Vegetius saith, that it commeth of some extream outward colde, striking sodainly into the emptie veines or some extreame heat, or rawe digestion, or else of som great hunger, caused by long fasting. It is easie to know by the description before mẽtioned. And as touching ỳ cure, Vegetius saith, that if it come of cold then it is good to giue him to drink one ounce of Laserpitium, with wine, and Tile mixt together, & made lukewarme: if of heat, then to giue it him with water & honye: if of crudities, then to heale him by fasting: if of hũger, then by féeding him well wỏ peace. But Martin saith, that this disease is called of ỳ Frẽch men, Surprius, & it cõmeth (as he saith) most chiefly of cold, taken after a heate: & he wisheth a horse ỳ is

thus taken, to be cured in this sort. First to bee let blood on both sides of the breast, and then to be put in a heate either by continuall stirring, and moleſting him, or elſe if hee will stirre by no meanes, then to burie him all saue the head, in a warme dunghill, and there to let him lie, vntill his limmes haue som feeling. And before you so burie him, it shall bee good to giue him this drinke. Take of Malmsie three pintes, and put thereunto a quarterne of Suger, and some Cinamon and Cloues, and let him drinke it good and warme, and vntill he be perfectly whole, let him be kept warme, and often exercised, and walked vp & down in the stable, and thinly dieted, and drinke nothing but warme water: wherein if you put some Fennel, and Parsly seed, to prouoke him to vrine, it shall be the better. And if hee cannot dung, let him be raked, and haue a glister made of the broath of Mallowes, and fresh butter.

## Of the Staggers. Chap. 21.

This is a dizzinesse of the head, called of the Latines Vertigo, and of the Italians as I remember Capistura. It commeth of some corrupt blood, or grosse and tough humors oppressing the braine, from whence proceedeth a vaporous spirit, dissolued by a weake heate, which troubleth all the head. The signes be these: dimnesse of sight, the reeling and staggering of the horse, who for verie paine will thrust his head against the wals, and forsake his meat. The cure according to Martin is thus. Let him blood in the temple veins: and then with a knife, make an hole of an inch long ouerthwart his forehead, hard vnderneath his foretop, and raise the skinne with a cornet, thrusting it vpward towardes the headstal, a good handful, and then put in a taint dipt in Turpentine, & hogges grease molten together, renewing the taint euerie day once vntil it bee whole, and do the like vpon the ridge of the rumpe: but mee thinkes it were better to do the like in the powle of his head, or nape of his necke, for so should the euil humors haue both wayes the easier and speedier passage: and as touching his diet, let him haue continually warme drinke, and mashes, and once a day be walked vp and downe faire and softly, to exercise his body.

Of

## Of the falling euill. Chap. 22.

THis is a kind of conuulsion or crampe, called of the Latines by the Greeke name Epilepsia, in Italian, Il morbo caduco, depriuing the beast at certaine times, and for a certaine space, of the vse of feeling, hearing, and seeing, and of all the other senses. And although it be a disease that hath bin seldome seene to chance vnto horses of this Countrey, yet it appeareth by Absirtus, and also by Vegetius, and diuerse others, that horses be subiect thereunto. For Absirtus writing vnto his friend Tiberius Claudius, saith that vnto horses chaceth many times the falling sicknesse. The signes whereof are these. The horse wil fall downe suddenly, partly through the resolution of his members, and partly through distension of his sinewes, and all his body wil quiuer and quake, and somtime hee wil some at the mouth. Vegetius againe writeth in this sort: By a certaine course of the moone horses and other beasts many times do fal, and die for a time as wel as men. The signes whereof are these. Being taken, their bodies wil quiuer & quake, and their mouths wil some, and when a man would think that they would die out of hand they rise suddenly vp, and fall to their meat. And by feeling the grissle of their nostrils with your finger, you shal know whether they wil fal often or not: for the more colde the grissle be, the oftener, and the lesse coldit be, the seldomer they wil fall. The cure. Let him bloud abondantly in the necke veines, and within fiue daies after let him bloud again in the temple veines, and let him stand in a warme & darke stable, & annoint al his bodie with comfortable ointments, and his head and eares with oile de Bay, & liquid Pitch or Tar, mingled together. And also put some thereof into his eares, and then make a Biggen for him of some soft warme skin, as of a sheeps skin or else of canuas, stuffed vnderneath with woll, and make him this purging drinke. Take of Radish rootes two ounces, of the rot of the herb called in Latin Panax, or Panaces, & of Scammony, of each one ounce, beat all these things together, and boile them in a quart of hony, and at sundrie times as you shal see it needefull, giue him a good spoonefull or two of this in a quart of Ale luke warm, whereunto would be put three or foure spoonefuls of oile. It is good also to

bloud

blowe the powder of Motherwort, or of Pyrethrum, vp into his nostrils, and if the disease doe continue still for all this, then it shall be néedefull to pearce the skinne of his forehead in diuerse places with a hot iron, and to let out the humours oppressing his braine.

## Of the night Mare. Chap. 23.

THis is a disease oppressing either man or beast in the night season when he slæpeth, so as he cannot draw his breath, and is called of the Latins Incubus. It commeth of a continual crudity, or raw digestiō of the stomach, from whence grosse vapors ascending vp into the head, doe oppresse the braine, and all the sensitiue powers, so as they cannot do their office, in giuing perfect fæling and mouing to the body. And if this disease chancing often to a man, be not cured in time, it may perhaps growe to a worse mischiefe, as to the falling euill, madnesse, or Apoplexie. But I could neuer learne that Horses were subiect to this disease, neither by relation, nor yet by reading, but onely in an old English writer, who sheweth neither cause nor signes how to knowe when a horse hath it, but onely teacheth how to cure it with a fond foolish charm, which because it may perhaps make you gentle reader to laugh, as well as it did mee, for recreation sake I will here rehearse it. Take a flint stone that hath a hole of his owne kind, and hang it ouer him, and write in a bill,

In nomine patris, &c.

Saint George our Ladies knight.
He walked day, so did he night,
Untill he her found,
He her beate, and he her bound,
Till truely her trouth she him plight,
That she would not come within the night,
There as Saint George our Ladies knight,
Named was thrée times, Saint George.

And hang this scripture ouer him, and let him alone. With such proper charmes as this is, the false Friers in times past were wont to charme the mony out of plaine folks purses.

Of

## Of the Apoplexie. Chap. 24.

THe Apoplexie, is a disease depriuing all the whole bodie of sense and mouing. And if it deprive but part of the bodie, then it is called of the Latines by the Greeke name, Paralysis, in our tongue a palsie. It proceedes of colde, grosse, and tough humors, oppressing the braine all at once, which may breed partly of crudities and raw digestion, and partly by meanes of some hurt in the head, taken by a fall, stripe, or otherwise. As touching Apoplexie, few or none writing of horsleach-craft doe make any mention thereof: but of the Palsie Vegetius writeth in this manner. A horse (saith he) may haue the palsie as well as a man, which is known by these signes. He will goe groueling and sideling like a crab carrying his necke awrie, as if it were broken, & goeth crookedly with his legs, beating his head against the wals, & yet forsaketh not his meate nor drinke, and his prouender séemeth moist and wet. The cure. Let him bloud in ỹ temple veine, on the contrarie side of ỹ wrying of his necke, and annoint his neck with comfortable ointments, and splent it with splents of wood to make it stand right, and let him stand in a warme stable, and giue him such drinkes as are recited in the next chapter following. But if all this profiteth not, then draw his necke with a hot iron on the contrarie side: ỹ is to say, on the hole side, from the nether part of the eare downe to the shoulders, and draw also a good long strike on his temple, on that side and on the other temple, make him a little star in this sort ✲, and from his reines to his mid backe, drawe little lines, in manner of a ragged staffe, and that will heale him.

## Of the crampe or conuulsion of the sinewes and muscles. Chap. 25.

A Conuulsion or cramp, is a forceable & painful cõtraction or drawing together of the sinews and muscles, which happens sometime through the whole bodie, & sometime but in one part or member onely. And according as the body may be diuersely drawne, so doe the Phisitiãs and also mine authours that write of Horsleach craft, giue it diuers names. For if the body bee drawne forwarde, then they

they call it in Greek Emprosthoronos, in Latin Tensio ad anteriora. And if the body be drawn backe, it is called in Greeke Opisthoronos, in Latine Tensio ad posteriora. But if the body be starke, and straite, bowing neither forward nor backward, then it is called simply in Greek Tetanos, in Latine Distensio or Rigor: which names also are applied to the like conuulsions of the necke. Notwithstanding, Vegetius writing of the disease, intituleth his chapters de Roborosis, a strange tearme, and not to be found againe in any other Authour. A conuulsion, as I said before, may chance as well to one part or member of the bodie, as to the whole body: as to the eye, to the skin of the forehead, to the rootes of ẏ tongue, to the iawes, to the lips, to the arme, hand, or legge: that is to say, whensoeuer the sinewe or muscles, seruing to the mouing of that part is euil affected or grieued. Of which conuulsions, though there be many diuerse causes: yet Hyppocrates bringeth them all into two: that is to say, into fulnesse, and emptinesse: for when a conuulsion procéedeth ether of some inflammation, of superfluous eating or drinking, or for lack of due purgation, or of ouermuch rest and lacke of exercise, al such causes are to be referred to repletion or fulnes. But if a conuulsion come by meanes of ouermuch purging or bléeding, or much watching, extreame labor, long fasting, or by wounding or pricking of ẏ sinews, thē al such causes are to be referred vnto emptines. And if the conuulsion procéede of fulnesse, it chanceth suddenly, and all at once: but if of emptinesse, then it commeth by little and little, and leisurely. Besides these kindes of conuulsions, there is also chancing many times in a mans fingers, legges & toes, another kind of conuulsion, which may be called a windie conuulsion, for that it procéeds of som grosse or tough vapor, entred into the branches of the sinewes, which maketh thē to swell like a lute string in moyst weather: which though it bee verie painefull for ẏ time, yet it may be sone driuen away, by chafing or rubbing the member grieued with a warme cloth. And this kind of conuulsion or cramp, chāceth also many times to a horses hinder legges, standing in the stable. For I haue séene some my selfe, that haue had one of their hinder legs drawne vp with the crampe almost to the bellie, so stiffe and hard as no man hath

béene

bene able to stirre it, neither could the horse himselfe set it down to the ground of a long season, which I thinke might be some remedied: first by continuall chafing and fretting his legge, with a good wispe, and then by tying vp the other hinder leg, or else the foreleg on the sore side, wherby he should be forced to set down the pained leg. Thus far I haue discoursed of the conuulsion of sinewes, and of the causes therof, according to ỹ opinions of the learned Physicians. Now I will briefly shew you the causes, signes, and cure thereof, according to the doctrine of mine Authours that write of horseleachcraft. Absirtus saith, that this disease doth come, either by driuing the horse into a sweate, when he halteth, or for that hee hath trodden vpon som naile, or by taking cold after iourneying, and sweating in winter season, wherby his lippes are clung together, or by long lying and rest after sweating, wherby the sinewes of his forelegs be nummed, or by hauing som stripe on his priuie members, or by long trauelling in the cold mountaines, where snowe and ise doth abound. For Theomnestus writeth, that comming out of Pæonia, with ỹ king and his army, and passing ouer ỹ mountaines to go into Italy, there fell such abundance of snowe, as not onely many souldiours died, sitting still on their horses backes, with their weapõs in their hands, being so starke and stiffe, and cleauing so fast to their saddles, as they could not easily be pulled out of them: but also diuerse horses in their going were so nũmed, as they could not bow their legs: yea and some were found starke dead, standing still on their fete, and few Horses or none escaped at that time frẽ from ỹ conuulsion of sinewes, insomuch that Theomnestus his owne horse which hee loued dearely, was sore vexed therewith. The signes to know whether a Horse bee troubled with the conuulsion of the sinewes or not, bee these. His head & necke wil be so stiffe and starke, as he can bowe it no manner of way, his eares wil stand right vp, and his eies wil be hollow in his head, and the fleshie parts therof in the great corners, wil be turned backward, his lips wil be clung fast together, so as he cannot open his mouth, & his tongue so nummed as he can neither eate nor drinke, his backebone and taile wil be so stiffe, as he cannot moue it one way nor other, and his legges so stiffe, as

they

they will not bow, and being laid, he is not able to rise, and specially on his hinder legs, but falleth downe on his buttocks, like a dog when he sitteth on the ground: & by meanes of the conuulsion in his backe, his bladder also for neighbourhood sake, suffereth, whereby the horse cannot stale but with great paine. The cure. Put him into a sweate, either by burying him all sane the head in some warm dunghil, or if he be a horse of price, cary him into a hote house, where is no smoke, and let him sweate there. Then annoint all his body, head, necke, legges, and all with oile of Cypres, and oile de Baie mingled together. Or else w̄ one of these oyntments. Take of hogs grease two pound, of Terepenthin halfe a pound, of peper beaten in powder one dram, of new ware one pound, of old oile two pound, boile all these together, and being made very warm, annoint all his body therewith. Or else with this ointment. Take of new wax one pound, of Terepenthin foure oūces, of oile de Bay as much, of Opoponax two ounces, of Deares sewet, & of oyle of Storax, of each three ounces, melt all these together, and annoint al his body therwith. It is good also, to bathe his head with the decoctiō of Fitches, or els of Lopines, and make him this drinke. Take xx. graines of long Pepper, finely beaten into powder, of Cedar two ounces, of Nitre one ounce, of Lacerpitium as much as a Bean, and mingle all these together, with a sufficient quantitie of white wine, and giue him thereof to drinke a quart euery morning and euening, for the space of three or foure dayes, or else this drink. Take of Opoponax two ounces, of Storax three ounces, of Gentiā 3. oūces, of Manna Succarie, three oūces, of Myrrhe one scruple, of long Pepper two scruples, & giue him this with old wine, or make him a drink of Lacerpitium, Cummin, Annis seeds, Fengreek, Bay berries, and old oile. In old time they were wont to let him bloud in the temples, which Absirtus doth not allowe, saying, that it will cause the sinewes of his lips to dry vp, so as the horse not being able to moue them, shal pine for hunger. As touching his diet, giue him at the first warme mashes and such soft meat as he may easily get down, & wet hay, bringing him to harder food by little & little. And in any case, let him bee kept very warm, and ridden or walked once a day to exercise his legs

and

and limbs. Theomnestus cured his horse, as he saith, by placing him in a warme stable, and by making a cleare fire without any smoke round about him, and the horse not being able to open his iawes of himselfe, he caused his mouth to be opened, & put therein sops dipt in a confection called Entrigon condium, & also annointed all his body with a medicine or ointment called Acopū (the making whereof hereafter followeth) dissolued in Cypres oile, which made him to fall into a sweate, and being before halfe dead and more, brought him againe to his feeling and mouing, so as he did rise and eate his meat.

The receipt of the medicine or ointment called *Acopum*.

TAke of Euforbium two ounces, of Castoreum foure ounces, of Adarces halfe a pound, of Bedellium three ounces, of Pepper one pound, of Fore greace two ounces, of Opoponar foure ounces, of Lacerpitium three ounces, of Amoniacum halfe a pound, of pigions dung as much, of Galbanum two ounces, of Nitrum fiue ounces, of Spumanitrie three ounces, of Ladanum one pound, of Pyrethrū and of Baie berries, of eche three ounces, of Cardamomum eight ounces, of the seed of rew halfe a pound, of ỳ seed of Agnus castus foure ounces, of parsly two ounces, of ỳ dried rots of Ircos or flower de luce fiue ounces, of Isop & of Carpobalsamum one pound, of oile of flower de luce & oile de Bay, of eche one pound & a halfe, of oile of spikenard three pound, of oleum Cypriū three pound & a half, of the oldest oile oliue that you can possible get fiue pound, of pitch not smelling of ỳ smoke one pound eight ounces, of turpentine one pound. Melt euerie one of these that will melte seuerally by themselues, & then mingle them together, with the rest of ỳ simples beaten into fine powder, & after that they haue bēn a little boiled on the fire, take it off, & straine it into a faire vessel, & whensoeuer you will giue your horse any therof, giue it him with wine. And if with long keeping it wareth hard, then soften it with oile of Cypres, so as it may be good and thicke. This confection is both a medicine, and also an ointment, and is called of the olde writers Acopum: which if it bee put into a horses nostrilles, it will draw out al noisome humors, and discharge his head of all

griefe

griefe yea, this medicine healeth all conuulsions, coldes, and drinesse or withering of the body, and driueth away all wearinesse and tiring.

## Of the cold in the head. Chap. 26.

According as the cold which the horse hath taken is new or olde, great or small, and also according as humours doe abound in his head, and as such humors bee thicke or thinne, so is the disease more or lesse daungerous. For if the horse casteth little or no matter out of his nose, nor hath no verie great cough, but is onely heauy in his head, and perhaps lightly coughеth now and then, it is a signe that he is stopped in the head, which we were wont to call the pose. But if his head be full of humours, congealed by som extreame cold, taken of long time past, and that he casteth foule, filthy, and stinking matter out at the nose, and coughеth grеuously: then it is a signe that he hath either the glaunders, or ỹ strangulion, mourning of the cheine, or consumption of the lunges. For all such diseases doe brеede for the most part of the rheume, or distillation that commeth from the head. Of the cures therof we leaue to speake, vntill we come to talke of ỹ diseases in the throte, minding here to shew you how to heale the pose, or cold before mētioned. Martin saith, it is good to purge his head by perfuming him with Frāk incense, and also to prouoke him to nеese, by thrusting two goose feathers dipt in oile de Bay vp into his nostrils, and then to trot him vp and downe the space of halfe an houre, for these feathers will make him to cast immediatly at the nose. Laurentius Russius would haue him to be perfumed with wheat, Pennirotal, and Sage sodden wel together, and put into a bag so hot as may be, which bagge would be so close fastened to his head, that al ỹ sauour thereof may ascend vp into his nostrils, and his head also would be couered and kept warme: and to prouoke him to nеese, he would haue you to bind a soft clout, annointed with sope, or else with butter and oile de Bay, vnto a sticke, and to thrust that vp and downe into his nostrils, so hie as you may conueniently go, and let him be kept warme, & drinke no cold water. Yea, it shall be good for thrее or foure dayes, to boile in his water a little

fenegrеke,

Senegréke, wheat meale, and a few Annis séedes. And euerie day after that you haue purged his head by perfuming him, or by making him to néese, cause him to be trotted vp and downe, either in the warme sunne, or else in the house halfe an houre, which would be done before you water him, and giue him his prouender.

## Of the diseases in the eyes. Chap. 27.

Horses eyes bee subiect to diuers grieses, as to be waterish, or bloudshotten, to be dim of sight, to haue the pin and web, & the haw, whereof some comes of inward causes, as of humors resorting to the eies: & som of outward, as of cold, heat or stripe.

## Of weeping or watering eies. Chap. 28.

This, as Laurentius Russius saith, may come sometime by confluence of humors, and sometime by some stripe, whose cure I leaue to recite, because it dooth not differ much from Martins experience here following: Take of pitch, rosen, and masticke, a like quantitie, melt them together. Then with a little sticke, hauing a cloute bound to the ende thereof, and dipt therein, annoint the temple veines, on both sides, a handfull aboue the eyes as broad as a testerne, and then clappe vnto it immediatly a few flockes of like colour to the horse, holding them close to his head with your hand, vntil they sticke fast vnto his head, thē let him bloud on both sides (if both sides be infected) a hādful vnder the eyes. Russius also thinketh it good, to wash his eyes once a day with pure white wine, & then to blow therein a little of Tartarum, and of Pomis stone, beaten into fine powder.

## Of bloudshotten eies, for a blowe, or itching and rubbing in the eies, Chap. 29.

Martin neuer vsed any other medicine, than this water heere following, wherewith hee did alwayes heale the foresayde grieses: Take of pure rose water, of malmesie, of Fennell water, of each three spoonefulles, of Tutia as much

as you may easily take with your thumbe and finger, of cloues a dosen beaten into fine powder, mingle them well together, & being lukewarme, or cold, if you will, wash the inward parts of the eie, with a feather dipt therein twise a day, vntil he be whole. Rusius saith, that to bloudshotten eies it is good to lay the white of an egge, or to wash them with the iuice of Selidonie.

## Of dimnesse of sight, and also for the pin and web, or any other spot in the eie. Chap. xxx.

IF the horse be dim of sight, or hath any pearle growing in his eye, or thin filme couering of the ball of his eye, then Rusius would haue you take of pommis stone, of tartarum, and of sal Gemma, of each like weight: and being beaten into very fine powder, to blowe a little of that into his eye, continuing so to doe euerie day once or twise, vntill he be whole. Martin sayeth, that he alwaies vsed to blowe a little sandinoire into the eie once a day, which simple he affirmeth to bee of such force, as it will breake any pearle or webbe in short space, and make the eye very cleare and faire. Rusius amongst a nũber of other medicines prayseth most of all the powder of a black flint stone.

## Of the Haw called of the *Italians*, *Il vnghia de gli occhi*. Chap. 31.

THis is a gristle couering sometime more than the one halfe of the eye. It procédeth of grosse and tough humors, descending out of the head: which Haw, as Martin saith, would be cut away in this sort. First pull both the eye lids open with two seuerall threds, stitched with a néedle to either of the lids. Then catch hold of the Haw with the stitch of another néedle & thred, and pull it out so farre as you may stay it vpon your finger, to the intent that you may cut it round the bredth of a penny, and leaue the blacke behind. For by cutting away too much of the fat and blacke of the eie, the horse many times becõmeth bleare eyed. And the haw being cleane taken away, squirt a little white wine or béere into his eye.

Of

## Of lunaticke eyes. Chap. 32.

VEgetius writeth De oculo lunatico, but he sheweth neither cause nor signes thereof: but onely saith, that the olde men men termed it so, because it maketh the eie som time to loke, as though it were couered with white, and sometime cleare.

Martin saith, that ỹ horse that hath this disease, is blind at certaine times of ỹ Mone, insomuch as he séeth almost nothing at all during that time, and then his eyes wil loke yellowish, yea, and somwhat reddish: which disease according to Martin, is to be cured in this sorte. First vse the plaister mentioned before in the Chapter of wateriſh or wéeping eyes, in such order as is there prescribed, & thē with a sharp knife make two slits on both sides of his head, an inch long, somwhat towards the nose, a handfull beneath the eies, not touching the veine: and with a cornet losen the skin vpward, ỹ breadth of a groat, and thrust therin a round péece of leather as broade as a two pennie péece, with a hole in the midst, to keepe the hole open, and looke to it once a day, that the matter may not be stopped, but continually run, the space of ten dayes, then take the leather out, and heale the wound with a little flax dipt in the salue héere following. Take of Turpētine, of hony, of ware, of each like quantitie, and boile them together, which being a little warmed, wil be liquid to serue your purpose, and take not away the plaisters from the temples, vntil they fal away of themselues: which being fallen, then with a small hote drawing iron, make a starre, in the middest of ech temple veine, where the plaister did lie. Which starre would haue a hole in the middest made with the button end of your drawing iron in this sort. ✻

## Of the Canker in the eie. Chap. 33.

THis commeth of a ranke and corrupt blood descending from the head into the eye. The signes. You shall see redde pimples, some small, and some great, both within and without vpon the eye liddes, and all the eye will looke redde, and bee full of corrupt matter. The cure according to Martin, is thus. First let him blood on that side the neck that the

eye is grieued, to the quantitie of a pottle. Then take of Roch Alum, of greene Copporas of each halfe a pound, of white Copporas one ounce, and boyle them in three pints of runing water vntil the halfe be consumed, then take it from the fire, and once a day wash his eye with this water, being made lukewarme, with a fine linnen cloth, & cleanse the eie therewith so oft as it may look rawe, continuing thus to do euery day once vntill it be whole.

## Of diseases incident to the eares, and poll of the head, and first of an impostume in the eare. Chap. 34.

Impostumes breede either by reason of some blowe, or bruising, or else of euill humors congealed in the eare by some extreame colde: the signes bee apparant, by the burning and painefull swelling of the eare and partes thereabout. The cure according to Martin is in this sort. First ripe the impostume with this plaister. Take of Lineseede beaten into powder, of wheate flower, of each halfe a pinte, of honny a pinte, of hogs grease or barrowes grease one pound. Warme all these things together in an earthen pot, and stirre them continuallie with a flat sticke, or slice, vntill they be throughly mingled and incorporated together, & then spread some of this plaister being warme vpon a peece of Linnen cloth, or soft white leather, so broad as the swelling and no more, and lay it warme vnto it, and so let it remaine one whole day, and then renue it with fresh ointment, continuing so to doe, vntill it breake: then lance the sore, so as the matter may haue passage downeward, and taint it to the bottome with a taint of flare dipt in this ointment: take of Metrosatum, of oyle olive, and turpentine, of ech two ounces, and mingle them together: and make him a biggen of Cannas to close in the sore, so as the taint with the ointment may abide within, renewing the taint once a day, vntill it be whole. But if the horse haue paine in his eares, without any great swelling of impostumation, then thrust in a little black wooll dipt in oile of Camomell, and that will heale it.

## Of the poll euill. Chap. 35.

THis is a disease like a Fistula growing betwixt the eares and the poll or nape of the necke, and proceedeth of euill humours gathered together in that place, or else of some blow or bruse, for that is the weakest and tenderest parte of all the head, and therefore soonest offended: which rude Carters doe little consider, whilest in their furie they beate their horses vpon that place of the head with their whipstocks, & therfore no horse is more subiect to this disease then cart horses: and this disease commeth most in winter season. The signes. You shall perceiue it by the swelling of the place, which by continuãce of time wil breake of it self, rotting more inward than outward, and therefore is more perilous if it be not cured in time, and the sooner it be taken in hand the better. The cure according to Martin is thus. If it be not broken, ripe it with a playster of hogges grease, laide vnto it so hot as may be, and make a biggen for the Poll of his head, to kéep it from cold, which biggen would haue two holes open, so as his eares may stand out: and renewe the plaister euerie day once vntill it breake, kéeping the sore place as warme as may bee. And if you sée that it will not breake so soone as you would haue it, then there as it is softest and most mœtest to be opened: take a round hot iron, as big as your little finger, and sharpe at the point, and two inches beneath that soft place, thrust it in a good dépenesse vpward, so as the point of the Iron may come out at the ripest place, to the intent that the matter may descend downeward, and come out at the nether hole, which would be alwaies kept open: and therfore taint it with a taint of flare dipt in hogs grease, & lay a plaister of hogs grease also vpon the same, renewing it euerie day once the space of 4. dayes, which is done chiefly to kill the heat of the fire. Then at the foure daies end, take of turpentine half a pound, clean washed in nine sundrie waters, and after that throughly dried, by thrusting out the water with a slice on the dishes side, then put thereunto two yolkes of egges, and a little saffron, and mingle them well together: that done, search the depth of the hole with a whole quill, & make a taint of a péece of spunge, so long as it may reach ỳ bottome, and so big as it may fill the wounde, and annoint the taint

with the foresaide ointment, and thrust it into the wound, either with that quil, or else by winding it vp with your finger & thūb, by little and little, vntill you haue thrust it home: and then lay on the plaister of hogs grease, made luke warme, renuing it euerie day once or twise vntill it be whole. But if the swelling cease, then you néd not to vse the plaister, but onely to taint it, and as the matter decreaseth, so make your taint euerie day lesser and lesser, vntill the wound be perfitly whole.

## Of the Viues. Chap. 36.

THe Viues bee certaine kirnelles growing vnder the horses eare, proceéding of some ranke or corrupt bloud resorting to that place, which within are full of little white graines, like white salt kirnels. The Italians call them Viuole, which if they be suffered to grow, Laurentius Rusius sayeth, that they will grieuously paine the horse in his throate, so as hee shal not be able to swallow his meat, nor to breath. They be easy to know, for they may be felt and also séene. The cure according vnto Martin, is in this sort. First drawe them right downe in the midst with a hot iron, from the rot of the eare, so farre as the tip of the eare will reach, being pulled downe, and vnder the rot againe drawe two strikes on each side, like an arrow head in this forme  then in the midst of the first line, lance them with a lancet, and taking hold of the kirnels, with a paire of pinsons, pull them so farre forward, as you may cut the kirnels out without hurting the veine: that done, fill the hole with white salt. But Hierocles would haue them to be cured in this sort: take a péece of spunge sowsed wel in strong vineger, & bind that to the sore, renewing it twise a day vntill it hath rotted the kirnels: that done, lance it in the nethermost part where the matter lyeth, and let it out, & then fill it vppe with salt finely brayed, and the next day wash all the filth away with warme water, and annoint the place with hony and fitch flower mingled together. But beware you touch none of the kirnels with your bare finger, for feare of venoming the place, which is very apt for a Fistula to brée in.

Of

## Of the cankerous Vlcer in the nose. Chap. 37.

THis disease is a fretting humour, eating and consuming the flesh, and making it all rawe within: and not being holpen in time will eate through the gristle of the nose. It commeth of a corrupt blood, or else of sharpe hunger ingendred by meanes of some extreame colde. The signes bee these. He will bleede at the nose, and all the flesh within will bee rawe, and filthy stinking sauours, and matter will come out at his nose. The cure according to Martin, is thus. Take of grēn copozas, of Alum, of each one pound, of white Copozas one quarterne, & boile these in a pottle of running water, vntill a pinte be consumed, then take it off, and put thereunto halfe a pint of hony: then cause his head to be holden vp with a drinking staffe, and squirt into his nostrils with a squirt of brasse, or rather of Elder, some of this water being lukewarme, three or foure times one after another, but betwixt euery drinking, giue him libertie to holde down his head, & to blow out ẏ filthy matter, for otherwise perhaps you may choke him. And after this it shal be good also without holding vp his head any more, to wash and rub his nostrils with a fine clout bound to a white sticks end, & wet in the water aforesaid, and serue him thus once a day vntill he be whole.

## Of bleeding at the nose. Chap. 38.

I Haue seene Horses my selfe, that haue bled at the nose, which haue had neither sore nor vlcer in their nose, and therefore I cannot choose, but saye with the Physicians, that it commeth by meanes that the veine which endeth in that place, is either opened broken, or fretted. It is opened manie times by meanes that blood aboundeth too much, or for that it is too fine, or too subtil, and so pearceth through the veine. Againe it may be broken by some violent strain, cut, or blow. And finally, it may be fretted, or gnawn through, by the sharpnesse of the blood, or else of some other euill humour conteined therein. As touching ẏ cure Martin saith, it is good to take a pint of red wine and to put therein a quarterne of Bole Armeni, beaten into fine powder, and being made lukewarme, to powre ẏ one halfe thereof the first day into his nostrill that bleedeth, causing his head to

be holden vp, so as the liquor may not fall out: and the next day to giue him the other halfe. But if this preuailech not, then I for my part, would cause him to be let bloud in the breast veine, on ỹ same side that he bleedech, at seuerall times: then take of Frãkincense one ounce, of Aloes halfe an ounce, and beate them into powder, and mingle them throughly with the whites of egges, vntill it be so thicke as hony, and with soft Hares haire, thrust it vp into his nostrill, filling the hole so full, as it cannot fall out, or else fill his nostrils full of Asses dung, or hogs dung, for either of them is excellent good to restraine any flure of bloud.

## Of the diseases in the mouth, and first in the bloudy rifts or chops in the Palat of the mouth. Chap. 39.

THis disease is called of the Italians, Palatina: which as Laurentius Russius saith, cõmeth by eating hay, or prouender, that is full of pricking sedes, which by continuall pricking and fretting the forrowes of the mouth do cause them to rankle, and to bleed corrupt & stinking matter, which you shal quickly remedy, as Martin saith, by washing first the sore places with vineger and salt, and then by annointing the same with hony.

## Of the bladders in a horses mouth, which our old Ferrers were wont to call the Gigges. The *Italians* call them *Froncelle* Chap. xl.

THese be little soft swellings or rather pustules with black heads, growing in the inside of his lippes, next vnto the great tawe teeth: which are so painefull vnto the horse, as they make him to let his meate fall out of his mouth, or at the least to keepe it in his mouth vnchawed, whereby the horse prospereth not. Russius saith, that they come either by eating too much cold grasse, or else of pricking, dustie & filthie prouender. The cure wherof, according to Martin, is in this sorte. Slit them with a launcet, and thrust out all the corruption, and then wash the sore places, with a little vineger and salte, or else with Alum water.

Of

## Of the Lampasse. Chap.xli.

THe Lampasse, called of the Italians, Lampascus, proceedeth of the abundance of blood, resorting to the first sorrowe of the mouth. I meane that which is next vnto the vpper foretéeth, causing ỹ said sorrow to swel so high as the horses téeth, so as he cannot chaw his meat, but is forced to let it fal out of his mouth. The remedy is to cut all ỹ superfluous flesh away, w̃ a crooked hote iron, made of purpose, which euerie Smith can do.

## Of the Canker in the mouth. Chap.xlii.

THis disease, as Martin saieth, is a rawnesse of the mouth and tongue, which is full of blisters, so as hee cannot eate his meate. Which proceedes of some vnnaturall heate, comming from the stomach. For the cure therof, take of Alum halfe a pound, of hony a quarter of a pint, of Columbine leaues, of Sage leaues, of ech a handful: boile all these together, in three pints of water, vntil a pint be consumed, & wash the sore place therewith, so as it may bléede, continuing so to doe euerie day once vntill it be whole.

## Of the heat in the mouth and lips. Chap.xliii.

SOmetime the heat that commeth out of the stomach, brédeth no canker, but maketh the mouth hote, & causeth the horse to forsake his meat. The cure whereof, as Martin saith, is in this sort. First, turne vp his vpper lippe, and tagge it lightly with a launcet, so as it may bléede, and then wash both that and all his mouth and tongue with vineger and salt.

## Of the tongue being hurt with the bitte, or otherwise. Chap.xliii.

IF the tongue bee cut or hurt any manner of way, Martin sayeth, it is good first to washe it with Alum water, and then to take the leaues of blacke Brimble and to choppe them together small with a little lard, that done to binde it with a little cloute, making it round like a ball, then hauing dipt the round end in honny, to rubbe the tongue therewith: continuing

tinuing so to do once a day vntill it be whole.

## Of the Barbles, or Pappes vnderneath the tongue. Chap. xlv.

THere be two little Pappes called of the Italians Barbole growing naturally (as I thinke) in euery horses mouth vnderneath the tongue, in the neather iawes: which if they shoot out of any length, Rusius saith, that they will hinder the horses feeding, and therefore he and Martin also would haue them to be clipt away, with a paire of sheeres, and that done, the Horses mouth to be washed with vinegar and salt.

## Of the paine in the teeth and gummes, of the woolfes teeth, and Iawe teeth. Chap. xlvi.

A Horse may haue paine in his teeth, partly by descent of humors from his head, downe into his teeth and gummes, which is to be perceiued by the rankenesse and swelling of the gummes, & partly by hauing two extraordinarie teeth called the woolfes teeth, which bee two little teeth growing in the vpper iawes, next vnto the great grinding teeth, which are so painful to the horse, as he cannot endure to chaw his meate, but is forced either to let it fall out of his mouth, or else to keepe it still halfe chewed, wherby the horse prospereth not, but waxeth leane & poore: and he will do the like also, when his vpper Iawe teeth be so farre grown, as they ouerhang the nether Iaw teeth, & therwith be so sharpe as in mouing his iawes they cut & race the insides of his cheekes, euen as they were raced with a knife. And first as touching the cure of the paine in the teeth that commeth by meanes of some distillation: Vegetius saith, it is good to rub all the outside of his gummes with fine chalk, and strong vinegar mingled together, or else after that you haue washed ỳ gummes with vineger, to strow on them the powder of Pomegranat pilles. But me thinkes that besides this it were not amisse to stop the temple veines, with the plaister before mentioned, in the chapter of weeping and watery eyes. The cure of ỳ Woolfes teeth and of ỳ iaw teeth according to Martin is in this sort. First cause ỳ horse head to be tied vp to some rafter or post, &

his

his mouth to be opened with a corde, so wide as you may easily see euerie part thereof. Then take a round strong iron toole, halfe a yard long, and made at the one ende in all pointes like vnto the Carpenters gouge, wherwith he pearceth his holes to be bored with a wimble or augor, and with your left hand set the edge of your toole at the rote of the wolfes téeth, on the outside of the iawe, turning the hollow side of the toole downewarde, holding your hand steadily so as the toole may not slip nor swarue from the foresaid teeth: then hauing a mallet in your right hand, strike vpon the head of the toole one prety blow, and therwith you shal losen the teeth, and cause it to bend inward: then slaying ỳ midst of your toole vpon the horses neather iawe, wrinch ỳ teeth outward, with the inside, or hollow side of the toole, & thrust it cleane out of his head: that doone serue the other woolfes teeth on ỳ other side in like maner, and fill vp ỳ empty places with salt finely brated. But if the vpper iawe téeth, do also ouerhang the neather téeth, and so cut the inside of his mouth, as is aforesaid; then kéeping his mouth stil open, take your toole and mallet, and pare all those téeth shorter, running alongst them euen frō ỳ first vnto the last, turning the hollow side of your toole towards ỳ téeth: so shal not the toole cut ỳ insides of his chéeks, ỳ backe or round side being turned toward ỳ foresaid chéeks, and that doone wash all his mouth with vineger and salt, and let him go.

## Why the diseases in the necke, withers, and backe, be declared here, before the diseases in the throat. Chap. xlviii.

HAuing hitherto spoken of the diseases, incident to a horses head, and to all the parts thereof, naturall order requireth that we should now descend into the throate, as a part next adiacent to the mouth. But forsomuch as the diseases in the throate haue not only affinitie with the head, but also with the lungs & other inward parts, which are many times grieued by meanes of distillation comming from ỳ head, & thorough the throte: I wil first speak of the diseases incident to the necke, withers, and backe of a Horse, to the intent ỳ when I come to talke of diseases, as rheumes & distillations do cause: I may

may discourse of them orderly, without interruption.

## Of the Cricke in the necke. Chap. xlviii.

BEcause the cricke is no other thing but a kinde of conuulsion, and for that we haue spoken sufficiently before, of all the kindes thereof in the chapter of conuulsion: I purpose not here therefore to trouble you with many words, but onelie shew you Rulsius opinion, and also Martins experience therein. The cricke then called of the Italians Scima, or Lucerdo according to Rulsius, yea and according to Martin, is, when the horse cannot turne his necke any manner of way, but holde it still right forth, insomuch as hee cannot take his meate from the ground but by times, and that verie slowly. Rulsius saith it commeth by meanes of some great weight laid on the horses shoulders, or else by ouermuch drying vp of the sinewes in the necke. The cure thereof according to Martin is in this sort. Draw him with a hot iron from the rot of the eare on both sides of ẏ necke, through the midst of the same, euen downe to the breast, a straw deepe, so as both ends may meet vpon the breast: then make a hole in his forehead, hard vnder ẏ foretop, and thrust in a cornet vpward betwirt the skin and the flesh a handfull deepe, then put in a goose feather doubled in the midst and annointed with hogges grease, to keepe the hole open, to the intent the matter may run out, the space of ten daies. But euerie day during that time, the hole must be cleansed once, and the feather also cleansed & fresh annointed, & so put in againe. And once a day let him stand vpon ẏ bit one houre or two, or be ridden two or three miles abroad by such a one as will beare his head, and make him to bring it in. But if the cricke be such as ẏ horse cannot holde his neck straight, but cleane awrie, as I haue seene diuers my selfe: then I thinke it not good that ẏ horse be drawne with a hot iron, on both sides of the necke, but only on the contrarie side. As for example, if he bend his head toward ẏ right side, then to draw him as is aforesaid only on the left side, & to vse the rest of the cure as is aboue said, & if neede be you may splent him also with handsome staues meete for the purpose to make his neck stand right.

Of

## Of Wennes in the necke. Chap. xlix.

A Wen, is a certaine kirnell like a tumor or swelling, the inside whereof is hard like a gristle, and spongious like a skinne full of wrettes. Of Wennes some be great and some bee small. Againe, some bee very painefull, and some not painefull at all. The Physicians say, that they proceede of grosse & vicious humors, but Vegetius saith that they chance to a horse by taking cold, or by drinking of waters that be extreame colde. The cure according to Martin is thus: take of Mallows, Sage, and red nettles, of each one handful, boyle them in running water, and put thereunto a little butter, and honny, and when the hearbes be soft, take them out and all to bruse them, & put thereunto of oyle of Baie two ounces, & two ounces of hogs grease, and warme them together ouer the fire, mingling them wel together: that done, plaister it vpon a peece of leather, so big as the Wenne, and lay it to so hot as the horse may endure it, renuing it euerie day in such sort, the space of eight daies: and if you perceiue that it will come to no head, then launce it from the midst of the Wenne downward, so deep as the matter in the bottome may be discouered and let out: that done, heale it vppe with this salue: take of turpentine a quarter, and wash it nine times in faire new water, then put thereunto the yolke of an egge, and a little English Saffron beaten in powder, and make a taint or rowle of Flaxe, and dip it in that ointment, and lay it vnto the sore, renewing the same euerie day once vntill it be whole.

## Of swelling in the necke after bloud letting. Chap. l.

THis may come of the fleame being rustie, and so causing the veine to rankle, or else by meanes of some cold winde striking suddenly into the hole. The cure according to Martin is thus. First, annoint it with oile of Camomel warmed, and then lay vpon it a little hate wet in colde water, and binde it about with a cloath, renewing it euerie day, the space of 5. or 6. daies, to see whether it wil grow to a head, or else vanish away. If it grow to a head, then giue it a slit with a lancet: and open it with a Cornet that ỹ matter may come out. Then heale it vp, by tainting it with Flaxe dipt in Turpentine and Hogs grease:

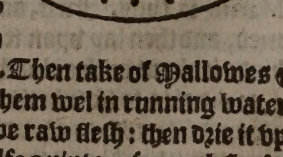
greaſe, moltē together, dreſſing it ſo once a day vntil it be whole.

## How to ſtaunch bloud. Chap. li.

IF a horſe be let bloud, when the ſigne is in the necke, the veine perhaps wil not leaue bléding ſo ſone as a man would haue it: which if any ſuch thing chance, then Ruſsius ſaith, it is good to binde thereunto, a little new horſedung, tempered with chalke, and ſtrong vineger, and not to remoue it from thence, the ſpace of thrée dayes, or elſe to lay thereunto, burnt ſilke, felt, or cloth, for all ſuch things will ſtaunch bloud.

## Of the falling of the Creſt. Chap. lii.

THis commeth for the moſt part, of pouertie, and ſpecially when a fat horſe falleth away ſodenly. The cure according to Martin, is thus. Drawe his Creaſt the deepeneſſe of a ſtrawe, on the contrarie ſide, with a hote iron, the edge of which iron, would bee halfe an inche broade, and make your beginning, and ending, ſomewhat beyond the fal, ſo as the firſt draught may goe all the way hard vpon the edge of the mane, euen vnderneath the rootes of the ſame, bearing your hand right downward, into the neckeward, then anſwere that with another draught beneath, and ſo farre diſtant from the firſt, as the fall is broad, compaſſing as it were all the fall: but ſtill on the contrary ſide: and betwirt thoſe two draughtes right in the middeſt, drawe a third draught, then with an iron buttō of an inch about, burn at each end a hole, and alſo in the ſpaces betwixt the draughtes, make diuers holes diſtant thrée fingers, broad one from another, as this figure doth ſhewe you: that done to ſlake the fire, annoint it euery day once, for the ſpace of nine dayes, with a feather dipt in freſh butter molten. Then take of Mallowes & of Sage, of each one a hādful: boile them wel in running water and waſh the burning away vntil it be raw fleſh: then dreſſe it vp with this powder. Take of honny halfe a pinte, & ſo much ſleakt Lime as wil make that honny thick, like paſt. Then hold it in a



fire

fire pan ouer the fire, vntil it be baken so hard, as it may be made in powder, and sprinkle that vpon the sore places.

## Of the manginesse of the mane. Chap. liii.

The maunginesse procéedeth of rankenesse of bloud, or of pouertie, of lowsinesse, or else of rubbing where a mangie horse hath rubbed, or of filthie dust lying in the mane for lacke of good dressing. The signes bee apparant by the itching and rubbing of the horse, and the scabbes, fretting both flesh and skinne. The cure according to Martin is thus. Take of fresh grease one pound, of quicksilver halfe an oūce, of Brimstone one ounce, of rape oyle halfe a pinte, mingle them together, and stirre them continually in a pot with a stile, vntil the quicksilver be so wrought with the rest, as you shal perceiue no quicksilver therein. That done take a blunt knife, or an old horsecombe, and scratch all the mangie place therewith vntill it bée raw and bloudie, and then annoint it with this ointment, in the sun shine if it may be, to the intent the ointment may sinke in: or else hold before it a fire pan, or som broad barre of iron made hot to make the ointment to melt into the flesh. And if you sée that within the space of three daies after, with this once annointing, he leaue not rubbing, then marke in what place he rubbeth, and dresse that place againe, and you shall sée it heale quickly.

## Of the falling of the haire of the mane. Chap. liiii.

It falleth for ỹ most part, because it is eaten with little wormes fretting the rotes in sunder, which according to Martin you shal remedy in this sort. Annoint the mane & creast with sope, then make strong ly, and wash all the mane and creast withall, & that will kill the wormes, within twise or thrise washing.

## Of griefes in the withers. Chap. lv.

To a horses withers and backe, do chance many griefes and sorances, which as Rufsius saith, doe sometime proceede of inwarde causes, as of the corruption of humors; and sometime of outwarde causes, as through the galling and pinching

pinching of some naughtie saddle, or by som heauie burthen laid on the horses backe or such like. And of such griefes, some be but superficial blisters, swellings, light galles, or bruisings: and bee easily cured. Some againe doe pierce to the very bone, and be dangerous, and specially if they be nigh the backe bone: let vs first then shew you the cure of the smaller griefs, and then of the greater.

## Of blistrings, or small swellings in the withers or backe, and of gallings. Chap. lvi.

WHensoeuer you see any swelling rise, then Martin would haue you to binde a little hot horse dung vnto it, and that will asswage it. If not, then to pricke it round about the swelling, either with a fleame, or else with a sharpe pointed knife not too deepe, but so as it may pierce the skinne and make the blond to issue foorth. That doone: take of Mallowes or else of Smallage, two or three handfulles, and boyle them in running water vntil they be so soft as pap. Then straine the water softly from it, and bruse the hearbes in a treene dish, putting thereunto a little hogges grease, or else sallet Oile, or sheepes sewet or any other fresh grease: boyle them and stirre them together, not frying them hard, but so as it may be soft and supple, and then with a clowte lay it warme vpon the sore, renuing it euerie day once, vntill the swelling be gone. For this will either driue it away, or else bring it to a head, which lightly chanceth not, vnlesse there be some gristle or bone perished. Rusius biddeth you, so sone as you see any swelling rise, to shaue the place with a rasor and lay thereunto this plaister: take a little wheate flower, and the white of an egge beaten together, & spread it on a linnen cloute, which being laide vnto the swelling two or three dayes, and not remooued, wil bring it to a head. And when you come to take it off, pull it away so softly as you can possible, and whereas you see the corruption gathered together, then in the lowest place thereof, pierce it vpward with a sharpe iron somewhat hot, that the corruption may come out, and annoint the sore place euerie day once with fresh butter, or Hogges grease: but if the skin be onely chafed off, without any swelling, then

wash

wash the place with water and salt, or else with warme wine, & sprinkle this powder thereon: take of vnsleakt lime beatē into fine powder, and mingle it with hony vntil it be so thick as past, and make rolles or balles thereof, and bake them in a fire panne ouer ẏ fire, vntill they be so hard as they may be brought to powder, for this is a very good powder to drie vp anie galling or soze. The powder of mirre or burnt silke, sealt, or cloth, or of anie old post, is also good for such purposes, but whensoeuer you vse this powder of lime & honie, let the place be first washed, as is afore, said.

## Of great swellings and inflammations in a Horses withers. Chap. lvii.

IF the swelling be verie greate, then the cure according to Martin is thus. First drawe round about the swellinge with a hotte iron, and then crosse him with the same iron in this manner  then take a round hot iron hauing a sharpe point, & thrust it into the swelling place on ech side vpward toward the point of the withers, to the intent that the matter may issue downeward at both the holes. That doone taint both the holes first with a taint dipt in hogs grease to kil ẏ fire, and also annoint all the other burnt places therwith, continuing so to do vntil the swelling be asswaged, renuing ẏ taints euerie day once, vntill ẏ fierie matter be fallen away, and then taint him againe with washed turpentine, mingled with yolkes of egges and saffron, in such manner as hath bēn afore said, renewing ẏ taint euery day once vntil it be whole. If you sē that the swelling for al this go not away, then it is a signe of some impostumation within, and therefore it shall be necessarie to launce it, and to let out the corruption, then take of hony halfe a pint, of Verdigrease two ounces beaten to powder, and mingle it together with the hony, then boile them in a pot vntill it loke redde, then being lukewarm, make ether a taint or plaister, according as the wound shal require, renewing the same euery day once, vntil it be whole. But the soze may bee so vehement, that for lacke of loking to in time, it wil pearce downeward betwixte

both shoulders, towards the intrails, which is verie dangerous: yea, and as Rufsius saith, mortall: because the corruption of the sore infecting the lungs and hart (which be ỹ vitall parts, & chiefe preseruers of life) the body must nedes decay. And therefore Martin would haue you to fill the hole with the salue last mentioned, and to thrust in after it a peece of a spung, as wel to kep ỹ hole open, as also to sucke out the corruption, renewing it euery day once, vntill it be whole.

## Of the hornes or hard bones, growing vnder the saddle side. Chap. lviii.

This is a dead skin like a peece of leather, called of the Italians, Corno, that is to say a horne, for that it is hard vnder hand, & commeth by meanes of some strait saddle, pinching the horse more on the one side than on the other: or else on both sides equally. The cure whereof according to Martin, is in this sort. Annoint them with fresh butter or hogs greafe, vntill they bee mollified and made so soft as you may either cut them, or pull them away, and then wash the wound with mans stale, or with white wine, and dresse it vp with powder of vnsleaked Lime.

## Of Wennes or knobbes, growing about the saddle skirts. Chap. lix.

These be great hard knobs, growing most commonly betwixt two ribbes, apparent to the eie, which by their hardnesse séeme to come of some olde bruse, and are called of the Italians, le Curte. The cure wherof, according to Martin is thus. First, mollifie them, by annointing them with hot hogs greafe euerie day once or twise, ỹ space of eight dayes, & if you perceiue that it wil come to no head wt this, then lance it from the middle downeward, that the matter may come out, then taint it with washed turpentine, yolkes of egges, and saffron mingled together as is afore sayd, renewing the taint euerie day once vntil it be whole.

Of

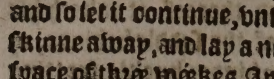
## Of the Nauill gall. Chap. lx.

THe Nauill gal is a bruse on ỹ backe behind the saddle right against the Nauill of the horse, and thereof it taketh his name. It commeth either by splitting of the saddle behinde, or for lacke of stuffing, or by meanes of the hinder buckle, fretting that place, or else by some great weight layd on his backe: you shall perceiue it by the puffed vp, and spongie flesh, looking like rotten lights or lungs, and therefore is called of the Italians, Pulmone, or Pulmoncello. The cure whereof, according to Martin, is thus. Cut it round about with a sharpe knife or rasor, euen to the bone, leauing no rotten flesh behinde: that done, take the white of an egge, and salte beaten together, and lay that plaisterwise to the sore, vpon a little towe renewing it once a day the space of two dayes. Then take of honny a quarterne of a pint, and of Verdigreale one ounce, beaten into powder, and boile them together in a pot, stirring it still vntill it loke red, and being luke warme, make a plaister with towe, and lap it to the wound, washing and cleansing wel the wound first, with a little warme vineger, or white Wine, cõtinuing so to doe once a day, vntil it begin to heale, and to skinne: then drie it vppe, by sprinkling theron this powder following. Take of hony a quarterne, and as much of fleakt lime as wil thicken ỹ hony like vnto past: and in a fire pan ouer the fire, stirre it still vntill it be hard baked, so as it may be beaten into powder: but before you throw on the powder, wash the wound first with warme Vineger, continuing so to do, vntill it be perfectly skinned and whole.

## Of the swaying of the necke. Chap. lxi.

THis is called of the Italians, Mal feruto, and according to Rusius, and Martins opinions, commeth either by some great straine, or else by vp heauie burthens: you shall perceiue it, by the reeling and rolling of the horses hinder parts in his going, which will faulter many times, and sway, sometime backeward, and sometime sideling, and bee ready to fall euen to the ground, and the horse being laid, is scant able to get vppe. The cure, according to Martin, is thus. Couer his backe with a shæpes skinne, comming hote from the shæpes backe,

laying the fleshie side next vnto his backe, & lay a warme howling cloth vpon the same, to keep his back as warme as may be, and so let it continue, vntill it begin to smell: then take the olde skinne away, and lay a new vnto it, continuing so to doe the space of three weekes. And if he amend not with this, then drawe his backe with a hot iron right out on both sides of the ridge of his backe, from the pitche of the buttockes vnto a handfull within the saddle, and then againe ouerthwart, in this sort.



And let euerie line be an inch distãt, or e frõ another (but let not such strokes be very deepe) and so burned as euerie one may looke yellow, then lay vpon the burning this charge heere following. Take of Pitche one pound, of Rosen halfe a pound, of bole Armony halfe a pound made in powder, and halfe a pint of tarre, and boyle all these together in a pot, stirring it vntill euerie thing be molten, and throughly mingled together: then being luke warme, dawbe all the burning therwith very thick, and thereupon clappe as many Flockes of the horses colour, as you can make to bide on, and remooue it not before it fall away of it selfe: and if it be in Summer, you may turn him to grasse.

## Of the weakenesse in the backe. Chap. lxii.

IT doth appeare by Laurentius Rusius, that there is an other kinde of weakenesse in the backe, called in Italian, le gotte, or morsecatura dele reni, that is to say, the fretting or biting of the reines, which as the saide Rusius sayth, proceedeth of abundance of humours, resorting to that place, whereby all the hinder partes of the horse doe lose their feeling and strength, and the horse falleth downe to the ground: yea, and such humours many times resorting to the heart, doe suffocate the same, and in two or three houres doe cause the horse to die. The remedie, according to Rusius, is in this sort. Let him bloud abundantly in the necke, and drawe his backe with a hot iron, in such sort as is declared in the last chapter. He saith also, it is good to make him swimme through a riuer, and to roll him vpon his hanches, nigh the huckle bones: and to make the haire

haire to grow againe, it is good as he sayth, to annoint the place with hogs grease, and three leaued grasse stamped together.

## Of Hide bound. Chap. lxiii.

HIde bound, is when the skinne cleaueth so fast to the horses backe, that a man cannot pull it from the flesh with his hand, which Ruellius calleth Coriago: it commeth for the most parte of pouertie, or else when the Horse after some great heat hath béene suffered to stand long in the raine or wet weather, for that wil cause the skin to shrinke, and to cling to his ribs. It is knowne by the leanenesse of the horse, and gauntnesse of his belly, and by ẏ fast sticking of the skin vnto his ribs whē you pul at it with your hand. The cure according to Martin is thus. Let him bloud on both sides ẏ belly in the flanke veines betwixt the flanke and the girding place: that done giue him this drinke: take a quart of good white wine, or else of good Ale, and put thereunto three ounces of good sallet Oile, of Cummin one ounce, of Annis séeds two ounces, of Licoras two ounces, beaten all into fine powder, and giue it him lukewarm with a horn. And when he hath drunk, let one standing at his hucklebone, rub him hard with his hand alongest the backe, and ouerthwart the ribs the space of halfe an howre: that done, set him in a warme stable, and let him stand in litter vp to ẏ belly, and couer all his back and ribs with a sack first throughly soked in a tub of colde water, and then wel and hard wrong, and ouer that cast another cloth, and girde it fast with a surcingle, stuffing him well about the backe with fresh strawe, continuing thus to doe euerie day once ẏ space of a weék, during which time giue him no cold water but lukewarme, and put therein a little ground malte. The wet sacke wil cause the backe to gather heate of it selfe, and the skin to loosen from the flesh: and if you wil bestowe more cost, you may annoint all his body with wine and oyle mingled together, according to the opinions of the old writes, which no doubt is a very comfortable thing, and must néeds supple ẏ skinne, and loosen it from the flesh.

Of the diſeaſes in the throte & lungs, and why the griefs of the ſhoulders and hips be not mentioned before, amongſt the griefs of the withers & backe. Chap. lxiiii.

SOme perhappes would lyke hēer, that forſomuch as I haue declared the diſeaſes of the necke, withers, and backe, that I ſhould alſo follow on now, with the griefes of the ſhoulders and hips. But ſith that ſuch griefes for the moſt part doe cauſe a horſe to halt, and that it requireth ſome ſkill to know when a horſe haltech, whether ẏ fault be in his ſhoulder, hippe, leg, ioint or foote, I thinke it not good to ſeparate thoſe parts aſunder, ſpecially ſith nature hath ioined them together, that is to ſay, the ſhoulders to the forelegs, and the hips to the hinder legges. And therfore according to natures order, I wil treat of them in their proper place: that is to ſay, after that I haue ſhewed you all the diſeaſes that be in the inward parts of a horſes body, not only aboue ẏ midriffe, as the diſeaſes of the throat, lungs, breaſt, & hart, but alſo vnder the midriffe, as thoſe of the ſtomach, liuer, guts, and of all ẏ reſt. And firſt, as touching the diſeaſes of ẏ throat, ẏ glanders, and ſtrangulion, to all horſes is moſt common.

Of the glanders, and ſtrangulion, ſo called according to the Italian name, *Stranguylione*. Chap. lxv.

MOſt Ferrers do take the glanders and ſtrangulion, to bee all one diſeaſe, but it is not ſo: for the glaunders is that which the Phyſicians call Tonſillæ, and the ſtrangulion is that which they call in Latine Angina, in Greeke Synanchi, and wee commonly call it in Engliſhe, the ſquinancie, or quinzie. Tonſillæ, is interpreted by them to be inflāmations of the kirnels, called in Latin Glandes, in Italian Glandulæ, which lie on each ſide of the throte, vnderneath the rote of the tong, nigh vnto the ſwallowing place: of which word glandes, or glandulæ, I thinke we borrow this name glanders. For whē the horſe is troubled with this diſeaſe, hee hath great kirnels vnderneath his iawes, eaſie to be ſeen or felt, paining him ſo, as he can not eaſily ſwallowe downe his meate: which commeth firſt of ſolo diſtillation out of the head. But if ſuch kirnels be not inflamed,

med, they will perhaps go away of themselues: or else by laying a little hote horse dung and straw vnto them, ỹ warmth therof wil dissolue them, and make them to vanish away. But if they be inflamed, they wil not go away, but increase & ware greater, and greater, and be more painful euery day than other, & cause the horse to cast continually filthy & stinking matter out at his nose. The cure therof, according to Martin, is thus. First ripe ỹ kirnels with this plaister. Take of bran two handfuls, or as much as wil thicken a quart of Wine or Ale: then put thereunto halfe a pound of hogs grease, and boile them together, and lay it hot to the sore with a cloth, renewing it euery day vntill it bee ready to breake: then lance it, and let out all the matter, and taint it with a taint of flare, dipt in this salue: take of Turpentine, of hogs grease, of ech like quantitie, and a little ware, and melt them together, and renue the taint euery day vntill it bee whole. Laurentius Rusius saith, this disease is very common to Colts, because in them doth abound flurible moisture, apt to be dissolued with euerie little heat, and to turn to putrifaction: and therefore if the horse be not ouer yong, he wold haue you first to let him bloud in the necke veine, and then to lay vnto the sore a ripening plaister, made of Hallowes, Linsedes, Rew, Wormwood, ground Iuie, oile of Baies, and Dialthea, and to annoint his throte also, and all the sore place, with fresh butter: and the sore being ripe, to lance it, or else to roll it, that the matter may come forth. But if the kirnels wil not decrease with this, then to pull them away by the rotes, and to drie vp the vlcerous place wt an ointment made of vnsleakt lime, Pepper, Brimstone, Nitrum, and oile Oliue. It shall be good also to purge his head by perfuming him euery day once, in such sort as hath been before declared. And let the Horse be kept warme about ỹ head, and stand in a warme stable, and let him drinke no cold water. But if you see that after you haue taken away the kirnelles, the horse doth not for all that leaue casting filthy matter at the nose, then it is to be feared, that he hath some spice of the mourning of the Chine: for both diseases proceed of one cause, and therefore I thinke good to speake of it here presently.

## Of the mourning of the Chine. Chap. lxvi.

THis worde mourning of the Chine, is a corrupt name, borrowed of the french tongue, wherein it is called More deschyen, that is to say, the death of the backe. Because many doo hold opinion, that this disease doth consume the marow of the backe: for remedie whereof, they vse strange kindes of cures. For some taking it to be a rheume, go about to stop it, by laying astrictiue, or binding charges vnto the nape of ỳ neck. Some againe do twine out ỳ pith of the backe with a long wire thrust vp into the horses head, and so into his necke and backe, with what reason I know not. Well, I know, that fewe Horses doe recouer that haue this disease. Some againe thinke that the lunges of the Horse be rotten, and that the horse doth cast them out at his nose. But Martin sayth, that hee hath cut vp diuerse horses which haue bẽn iudged to haue died of the mourning of the Chine, but he could neuer find either back or lungs, to be perished, but onely the Liuer, and most commonly that side of the Liuer, which answereth the nostrill wherat he casteth, whereof we wil talke in his proper place, when we come to speake of the diseases in the Liuer. The Italians do cal this disease Ciamorro, the old Authors doe call it the moist maladie, whereof Theomnestus maketh two differences. For in the one, the mater which he doth cast at the nose is white, and doth not smell at all, and in the other, that which he casteth is a filthy and stinking corruption. They procẽde both of colde humours congealed in ỳ head, but more abounding in the one than in the other: by reason perhaps, that the horse was not cured in time: for of colde first cõmeth the Pose, and the cough, then the glanders, and last of al, the mourning of the chine. When ỳ horse casteth matter at the nose, that is not stinking, he may be easily cured, by such remedies as haue bẽn before declared in the Chapter of ỳ Pose: but if the matter be very filthy and stinking, then it is verie hard to cure. Notwithstanding, it shal not grẽue me to write vnto you hẽre, the experience of Theomnestus, & of Laurentius Rusius. Theomnestus cure is thus. Take of water and hony called of ỳ Physicians Hydromel, a quart, and put therunto thrẽe ounces of oile, and poure ỳ into his nostril euery morning the space of

thrẽe

thrée daies: and if that do not profit him, then let him drink euery day, or once in two daies, a quart of olde wine, mingled with some of the medicine, or rather the precious meat, called of the old writers Tetrapharmacum, and that wil restore him to his former estate. Laurentius Rusius saith, that of all diseases there is none more perillous, nor more to be suspected, than ỹ rheume which commeth of cold, for Horses haue large Conduites, & are full of moisture, & therefore if cold once enter, it findeth matter inough to worke on, to breed continual distillation, as well outwardly at the nose, as inwardly, descending downe to the vital parts, in such sort, as it doth suffocate ỹ same. The signes according to ỹ said Rusius be these. The horse doth cast matter cõtinually at the nose sometime thinne and sometime thicke, his nostrils, eares, and al his outward parts, wil be cold to the féling: his eies, head, and all his body heauy, and he wil cough, & haue small appetite to his meat, and lesse to his drink, and sometime he wil tremble and shake. His cure is in this sorte. Purge his head, partly by perfuming him, & partly by making him to néese in such sort, as hath bẽn before taught in ỹ chapter of the Pole: which waies of perfuming and purging ỹ head, as they be good, so doth Rusius praise these two hær following to be most excellent. The first is this. Take of ỹ stalkes of Vitis alba, otherwise called Brioni, or wild Vine, two or thrée good handfuls, & braise them betwixt two stones, and being so brused, put them into a linnen bag, & fasten the bagge to ỹ horses head, so as he may receiue the sent vp into his nostrils, without touching the hearbe with his mouth, and this wil cause ỹ humours to come down aboundantly. The second medicine. Take of Euforbium beaten into fine powder, thrée ounces, of ỹ iuice of Bétes one pound, of Swines blood half a pound, boile al these together vntil they be throughly mingled, & liquid like an ointment, and then take it from the fire, and put thereunto one ounce more of Euforbium and mingle them againe throughly together, & preserue ỹ same in a boxe to vse at néedful times, in this sort. Make two stiffe lõg rowles or tampins of linnen clouts, or such like stuffe, sharpe pointed like Suger loues: which tampins are called of ỹ Physicians in Latin Pessi, & being annointed with the ointment afore said,

said, thrust them vp into the Horses nostrils, and let him abide therin a prettie while, then pul them out, and you shal see such abundance of matter come forth at his nose, as is maruellous to behold. Rusius also praiseth very much this medicine heer following. Take as much of ỹ midle bark of an Elder tree, growing on the water side, as wil fill a new earthen pot of a meane size, putting thereunto as much clear water, as the pot wil hold, and let it boile vntill the one halfe be consumed: and then to be filled vp againe with fresh water, continuing so to do three times one after another, and at the last time that the one halfe is consumed take it from the fire, and straine it through a linnen cloth. Then take two parts of that decoction, and one part of hogs grease, or butter, & being warmed againe together, giue the horse to drink therof one hornful, and powre another hornful into his nostrill that casteth, and whensoeuer you giue him this medicine, let the Horse be empty and fasting, and kéep him without meate also, two or three houres after. For this is a very good drinke for any sickenesse that commeth of colde. Moreouer, open the skin of his forehead, and of his temples, & also of his taile, with a sharp hot iron, that the corrupt humours, may issue outward. That done, take hot bricks, or els a pan of fresh burning coales, and hold it nigh vnto his belly, & flanks, to the intent they may be throughly warmed, and being so warmed annoint them all ouer, with oile de Bay, or Dialthea, to defend his body from the cold, & let his head be wel couered, and all his belly kept warme. Yea, and it were good to bathe his head sometime, as Rusius saith, with a bath made of Rewe, Mormewood, Sage, Juneper, Bay leaues and Hysop. And let his drinke be warme water mingled with wheat meale: yea, & to make it ỹ more comfortable, it were good as Rusius saith, to put thereunto som Cinamon, Ginger, Galingale, & such hot spices. And his meat in Winter season would be no other but sodden corne or warm mashes, made of ground Mault and wheat bran: in Summer season if he went to grasse, I thinke it would do him most good, so that he go in a drie warm ground: for by féeding alwaies downward, he shal purge his head the better, as Rusius saith. Thus much of the Glanders, and mourning of the Chine. Now we wil speake somewhat of the

strangulion,

strangulion, according to ỹ opinion of the authors, though not to the satisfaction perhaps of our English Ferrers.

## Of the Strangulion or Squinancie. Chap. lxvii.

The strangulion, called of the Latines Angina, according to the Physicians, is an inflãmation of the inwarde partes of the throat, and as I sayd before, is called of ỹ Grecks Synanchi, which is as much to say in English as a strangling, whereof this name strangulion as I thinke is derived: for this disease dooth strangle eyther man or beast, and therefore is numbred amongst the perillous and sharpe diseases called of the Latines Morbi acuti, of which strangling the Physicians in mans body make foure differences. The first and worst is, when no part within the mouth nor without, appeareth manifestly to be inflamed, and yet the patient is in great perrill of strangling. The second is, when the inward parts of the throat only be inflamed. The third is, when the inward and outward parts of the throat be both inflamed. The fourth is, when the muscles of the necke are inflamed, or the inwarde ioints thereof so losened, as they straiten therby both the throat, or weland, or windpipe: for short breath is incident to all the foure kindes before recited, and they proceed all of one cause: that is to say, of some cholerick or bloudy fluxion, which comes out of the branches of the throat veins into those parts, and there breedeth som hot inflãmation. But now to proue that a horse is subiect to this disease, you shall heare what Absirtus, Hierocles, Vegetius, and others doe say. Absirtus writing to his friend a certain Ferrer or horseleach, called Aistoricus, speaketh in this maner. When a horse hath ỹ strangulion it quickly killeth him, the signs whereof be these. His temples will be hollow; his tong wil swell and hang out of his mouth, his head and eyes will be swollen, and the passage of his throat stopt so as he can neither eat nor drink. All these signs be also confirmed by Hierocles. Moreouer, Vegetius rendreth ỹ cause of this disease, affirming that it procedeth of abundance of subtil bloud, which after long trauel wil inflame the inward or outward muscles of the throat or weland, or such affluence of bloud may come, by vse of hot meates after great

trauell

trauell, being so alteratiue, as they cause those parts to swell in such sort as ỹ horse can neither eat nor drink, nor draw his breth. The cure according to Vegetius, is in this sort. First bathe his mouth and tongue well with hot water, and then annoint it with the gall of a Bull, that done, giue him this drinke. Take of olde oile two pound, of old wine a quart, nine Figs, and nine Leekes heads wel stamped and braied together. And after you haue boyled these a while, before you strain them, put therunto a little Nitrum Alexandrinum, and giue him a quart of this euery morning and euening. Absirtus & Hierocles would haue you to let him blood in the palat of his mouth, and to powre wine & Dyle into his nostrils, and also to giue him to drinke this decoction of Figs and Nitrum sodden together, or else to annoint his throat within with Nitre oile and hony, or else with hony and hogges dung mingled together, which differeth not much frō Galen his medicine, to be giuen vnto man. For he saieth, that hony mingled with the powder of dogs dung that is white, and swallowed downe, doth remedy ỹ squinancie presently. Absirtus also prasseth the ointment made of Bedellium, and when the inflāmatiō beginneth somwhat to decrease, he sayth it is good to purge the horse, by giuing him wild Cucumber, and Nitre to drinke. Let his meate bee grasse if it may be gotten, or else wet Haie, and sprinkled with Nitre. Let his drink also be luke warme water, with some barly meale in it.

## Of the Cough. Chap. lxviii.

OF Coughes some bee outwarde, and some bee inward. Those bee outward which doe come of outward causes, as by eating a feather, or by eating duskie or sharpe strawe and such like thinges: which tickling his throate, causeth him to cough: you shal perceiue it by wagging and wrying his head in his coughing, and by stamping sometime with his foote, labouring to get out the thing that greeueth him, and cannot. The cure according to Martin is thus. Take a Willow wand, rowled throughout with a fine linnen clowte, and then annoint it all ouer with hony, and thrust it downe his throate, drawing your hand to and fro, to the intent it may either driue downe

the

the thing that grieueth him, or else bring it vp, and doe this twise or thrise, annointing euery time the sticke with fresh hony.

## Of the inward and wet cough. Chap. lxix.

OF inwarde Coughes some be wet and some be dry. The wet cough is that, which commeth of colde, taken after some great heate giuen to the Horse, dissoluing humours, which being afterwarde congealed, doe cause obstruction and stopping in the lungs. And I call it the wet cough, because the horse in his coughing, wil voide moist matter at his mouth after that it is once broken. The signes be these: The horse wil be heauy, and his eies wil run a water, & he wil forsake his meate, and when hee cougheth, he thrusteth out his head, and reacheth with great pain at the first, as though he had a drie cough, vntil the fleame be broken, and then he wil cough more hollow, which is a signe of amendment. And therfore, according to Martins experience, to the intent the fleame may breake the soner, it shal be necessarie to kéep him warme, by clothing him with a double cloth, and by littering him vp to the belly with fresh straw, and then to giue him this drinke: take of barly one pecke, and boile it in two or three gallons of faire water, vntill the barly beginne to brust, and boile therwith of bruised Licoras, of Annis séedes, of Raisins, of each one pound, then strain it, and to that liquor put of hony a pinte, and a quarterne of Sugercandy, & keep it close in a pot to serue the horse therewith foure seuerall morninges, and cast not away the sodden barley, with the rest of the strayninges, but make it hot euery day to perfume the horse withal, being put into a bag, and tied to his head: and if the horse wil eat of it, it shal do him the more good. And this perfuming in Winter season would be vsed about ten of the clocke in the morning, when the Sunne is of some height, to the intent the horse may be walked abroad, if the Sunne shine, to exercise him moderatly. And vntil his cough weare away, faile not to giue him warme water, with a little ground mault. And as his cough breaketh more and more, so let his water euery day be lesse warmed, than other.

Of

## Of the drie Cough. Chap. lxx.

This semeth to come of some grosse and tough humour, cleauing hard to the hollowe places of the lungs which stoppeth the windpipes, so as the horse cannot easilie drawe his breath, and if it continue, it will either grow to ỹ Pursick, or else breake his wind altogether. The signes bee these. He wil cough both often, drily, & also vehemẽtly without voiding at the nose, or mouth. The cure, according to Martin, is in this sort. Take a close earthẽ pot, & put therin 3 pints of strõg vinegar, and foure egs shels & all vnbroken, and foure Garlicke heads cleane pilled and brused, & set the pot being verie close couered, in some warme dunghil, & there let it stand a whole night: & the nert morning with your hand take out the egs, which wil be so soft as silke, and lay them by, vntill you haue strained the Garlicke & vineger through a faire cloth, then put to that liquor a quarterne of hony, and halfe a quartern of sugercandy, & two ounces of Licorias, and two ounces of Annis seeds, beaten al into fine powder. And thẽ ỹ horse hauing fasted al the night before, in the morning betwirt seuen and eight of the clocke, open his mouth with a cord, and whorle therein one of the egges, so as he may swallow it downe, and then immediatly powre in after it a horne full of the foresaid drinke, being first made lukewarme, and then cast in another egge, with another horne full of drink, and so continue to do, vntill he hath swallowed vp all the egges and drunke vp all the drinke: and then bridle him, and couer him with warmer clothes, than he had before, and bring him into the stable, and there let him stand on the bitte, at the bare racke, well littered vp to the belly, the space of two houres. Then vnbitte him, and if it be in Winter, offer him a handful of Wheaten straw: if in Summer, giue him grasse, and let him eate no hay vnlesse it be verie well dusted, and sprinckled with water, and giue him not much thereof. And therefore you shal need to giue him the more prouender, which also must bee wel cleansed of all filth, and dust, and giue him no colde water, the space of nine dates. And if you perceiue that ỹ Cough doth not weare away, then if it bee in Winter, purge him with these pilles. Take of larde two pound laid in water two houres: then take

nothing

nothing but the cleane fat thereof, and stamp it in a mortar, and thereto put of licorias, of Annis seedes, of Fenegreke of ech beaten into powder three ounces, of Aloes in powder two ounces, of Agarike one ounce. Knead these together like paast, and make thereof six bals as big as an egge. Then the horse hauing fasted ouer night, giue him ỳ next morning these pilles one after another, annointed with hony and oyle mingled together in a platter, and to the intent he may swallowe them downe whether he will or not, when you haue opened his mouth catch holde of his tong, and hold it fast while you whozle in one of ỳ pils, that don thrust it into his throte wt a rolling pinne, and then let his tong goe vntil he hath swallowed it down: then giue him in like maner al the rest of the pilles, and let him stand on the bit warme clothed, and littered the space of three howres at the least, and after that, giue him a little wet hate, & warm water with a litle ground malt in it to drink, and let him drink no other but warm water the space of a weeke. And now and then in a faire sunnie day, it shal be good to trot him one houre abroad to breath him.

## Of the fretized, broken and rotten lungs. Chap. lxxi.

This procedeth as Absirtus and Theomnestus sayth, either of an extreame cough, or of vehement running, or leaping, or of ouer greedie drinking after great thirst: for the lungs bee inclosed in a verie thin filme or skinne, and therefore easie to bee broken, which if it bee not cured in time, doth grow to apostumation, and to corruption, oppressing all ỳ Lunges, which of old Authors is called Vomica, & Suppuratio. But Theomnestus saith, that broken Lungs, and rotten lungs, be two diuers diseases, and haue diuers signes, & diuers cures. The signes of broke lugs be these. The horse draweth his wind short, and by little at once, he will turne his head often towarde the place grieued, and groneth in his breathing, he is afraide to cough, & yet cougheth as though he had eaten small bones. The same Theonestus healed a friends horse of his, whose lugs were fretized, or rather broken as he saith, by continual eating of salt, with this maner of cure here following. Let the horse haue quiet

and

and rest, and then let him bloud in ỹ hanches, where the veines appear most: and giue him to drink the space of seuen daies barlie or rather Otes sodden in gotes milke: or if you can get no milke, boile it in water and put therein som thick collops of lard and of Deares sewet, and let him drink that: & let his common drinke in winter season, be the decoction of wheat meale, and in summer time the decoction of barlie: and this as he saith wil bind his lungs again together. Vegecius vtterlie disalloweth letting of bloud in any such disease as this is, and also al maner of sharp medcines, for feare of prouoking the cough: by meanes whereof the broken places can neuer heale perfectlie. And therfore neither his medicines nor meate would be harsh but smoth, gentle and coling. The best medicine that may be giuē him at al times is this: taken of Fengrēke and of linsēde of ech halfe a pounde, of Gum dragant, of Mastick, of Mirre, of Sugar, of Fitch flower, of ech one ounce. Let all these thinges bee beaten into fine powder, & then infused one whole night in a sufficient quantity of warme water, & the next day giue him a quart of this lukewarme, putting therevnto two or three ounces of oile of roses, continuing so to doe manie daies together, and if the disease bee new, this will heale him: yea and it will ease him very much although the desease be old, which then is thought vncureable. And in winter season so long as he standeth in the stable, let him drink no cold water, & let his meat be clean without dust, but in summer season it were best to let him run to grasse: for so long as he eateth grasse, a man shall scantlie perceiue this disease. Thus much of broken lungs.

## Of putrified and rotten lungs. Chap. lxxii.

THe signes to knowe whether a horses lungs be putrified or rotten, according to Theomnestus are these. The horse will both eate and drinke more greedily than hee was wont to doe, hee shall bee oftener vexed with a drie cough, & in coughing he will cast little lumpes of matter out at his mouth. The cure wherof according to Theōnestus, is thus. Giue him to drinke euery morning, ỹ space of seuen daies, the iuice of Purslen mingled with oile of roses, and adde thereunto a little

litle tragagantum that hath been laid before in steepe in Goats milke, or else in barly or Oten milke, strained out of the corne. When the Apostume is broken, then a very strong and evil savour wil come out at his nostrils: for remedy wherof, it shal be good to give him ỹ space of seaven dayes this drinke here following: take of the rot called Costus, two ounces, and of Casta or else of Cynamon three ounces beaten into fine powder, & a few raisins, & give it him to drink with wine. But Vegetius would have him to be cured in this sort and with lesse cost I assure you. Take of frankincense and Aristoloch, of ech two ounces, beatē into fine powder, & give him that with wine, or else take of unburnt Brimstone two ounces, and of Aristoloch one ounce & a halfe beaten into powder, and give him that with wine. And he would have you also to draw his breast with a hot iron, to the intent that the humors may issue forth outwardly.

## Of shortnesse of breath. Chap. lxxiii.

A Horse may have shortnesse of breach, by hasty running after drinking, or upon a ful stomach, or by the descending of humors unto his throte or lungs, after some extreame heat dissoluing the said humors: which so long as there is nothing broken, may in the beginning bee easily holpen. The signes bee these. The horse wil continually pant, and fetch his breach short, which wil come very hot out at his nose, and in his breaching he wil squeise in the nose, and his flanks wil beat thick: yea and some cannot fetch their breath unlesse they hold their necks right out and straight, which disease is called of the old writers by the Greeke name Orthopnœa. The cure. Let him bloud in the necke, & give him this drinke: Take of Wine, and oile, of each a pint, of frankincense halfe an ounce, and of ỹ iuice of Horehound halfe a pint. It is good also to powre into his throte hony, butter, and hogges grease molten together, and made lukewarme. Tiberius saith, it is good to give him whole egges, shelles and al, steeped and made soft in vineger: that is to say, the first day three, the second day five, and the third day seaven, and to powre wine and oile into his nostrils. I for my part would take nothing but Annis seedes, Licoras, & Sugar-

candy, beaten all into fine powder, giue him that to drinke, with wine and oyle mingled together.

## Of the Purficke. Chap. lxxiiii.

THis is a shortnes of breath, & ỳ horse that is so diseased is called of ỳ Italians, Cauallo pulsino, or Bolso: which I think is derined of ỳ Latin word Vulsus, by chãging V. into B. & I thinke differeth not much frõ him that hath broken lungs, called of Vegetius and other old writers Vulsus, for such shortnes of breath comes either of ỳ same causes or else much like, as aboũdance of grosse humors cleauing hard to ỳ hollow places of ỳ lungs, & stopping the wind pipes. And ỳ wind being kept in, doth resorte downward as Rusius saith, into ỳ horses guts, & so causeth his flankes to beate continually without order: that is to say, more swiftly and hier vp to ỳ backe, than the flanks of any horse that is sound of wind. And if this disease be old, it is seldome or neuer cured, and though I find many medicines prescribed by diuers authours, few or none doe content me, vnlesse it bee that of Vegetius, recited before in the chapter of broken lungs. And if that preuaileth not, then I think it were not amisse according to Rusius, to purge him with this drink here following: take of Maiden hair, of Ireos, of Ash, of Licorias, of Fengreke, of Raisins, of ech half an ounce, of Cardanum, of pepper, of bitter Almonds, of Baurach, of ech two ounces, of nettle sæd, and of Aristoloch, of ech two ounces, boil them al together in a sufficient quantitie of water, and in that decoction dissolue half an oũce of Agaricke, and two ounces of Coloquintida, together with two pound of hony, and giue him of this a pinte or a quart at diuerse times: and if it be to thick make it thinner, by putting thereunto water wherein Licorias hath bẽne sodden, and if nœde bee you may also draw both his flanks crosselwise with a hot iron, to restraine the beating of them, and also slit his nostrils, to giue him more aire. And if it be in summer turne him to grasse, if in winter let him bee kept warme, and giue him now and then a litle sodden wheat. Rusius would haue it to be giuen him thrée daies together and also new swẽt wine to drinke, or else other good

wine

wine mingled with licoras water.

## Of a Consumption. Chap. lxxv.

A Consumption is none other thing but an vlceration of the lunges, proceeding of some fretting or gnawing humour, descending out of the head into the lunges. And I take it to bee that disease which the olde writers are woont to call the drie malady: which perhaps some would rather interpret to be the mourning of the Chine, with whom I intend not to striue. But thus much I must needs say, that euerie horse having the mourning of the Chine doth continually cast at the nose, but in the dry malady it is cleane contrary. For all the authors, that write therof affirme, that ỹ horse auoideth nothing at the nose. And the signes to knowe the dry malady, according to their doctrine, be these. His flesh doth cleane consume away, his belly is gaunt, & the skinne therof so hard stretched, or rather shrunk vp, as if you strike on him with your hand it wil sound like a Taber, and hee wil bee hollowe backt, and forsake his meat, and though he eateth it, (as Absirtus saith) yet he doth not digest it, nor prospereth not withall, he would cough and cānot but hickinglie, as though he had eaten smal bones. And this disease is iudged of al the authors to be incurable. Notwithstanding, they say all, that it is good to purge his head with such perfumes as haue bēn shewed you before in the chapter of the glāders, and also to giue him alwaies Colewortes, chopt smal with his prouender. Some would haue him to drinke the warme blood of suckling Pigs new slaine, and som the iuice of leekes, with oile and wine mingled together. Others praise wine and Frankincense, some oile and Rewe, some would haue his body to be purged, and sent to grasse.

## Of the Consumption of the flesh, and how to make a leane horse fat. Chap. lxxvi.

MArtin sayth that if a Horse take a great colde after a heat, it wil cause his flesh to waste, and his skinne to ware harde and drie, and to cleaue fast to his sides, and hee shall haue no appetite vnto his meate, and the fillets of his backe

wil fal away, and all the flesh of his buttockes, and of his shoulders wil be consumed. The cure whereof is thus. Take two sheepes heads vnflead, boyle them in three gallons of Ale, or fair running water, vntil the flesh be consumed from the bones, that done, straine it through a fine cloth, and then put thereunto of Suger one pound, of Cynamon two ounces, of conserue of Roses, of Barberries, and Cherries, of ech two oũces, and mingle them together, and giue the horse every day in the morning, a quart thereof lukewarme, vntill all bee spent: and after euerie time he drinketh, let him be walked vp and downe in the stable, or else abroad if the weather be warme, and not windie, and let him neither eate nor drink in two houres after, & let him drinke no cold water, but lukewarme, the space of fifténe daies, and let him be fed by litle, and litle, with such meate as the horse hath most appetite vnto. But if the Horse be nesh and tender, and so ware leane without any apparant griefe or disease, then the old writers would haue him to bée fed now and then with parched wheat, and also to drink wine with his water, and to eate continually wheate branne mingled with his prouender, vntil hee ware strong, and he must be often dressed and trimmed, and lie soft, without the which thinges his meate wil doe him but litle good. And his meat must be fine and cleane, and giuen him often and by litle at once. Rufsius saith, that if a horse eating his meat with a good appetite, doth not for al that prosper, but is still leane: then it is good to giue him Sage, Sauin, Baie berries, Earth nuttes, and Boares grease, to drink with wine: or to giue him the intrailes of a Barbell or Tench, with white wine. Hee saith also that sodden Beanes mingled with bran and salt, wil make a leane Horse fatte in very short space.

## Of griefe in the breast. Chap. lxxvii.

LAurentius Rufsius writeth of a disease called in Italian, Granezza di petto, which hath not beene in experience amongst our Farriers, that I canne learne. It commes, as Rufsius sayeth of the superfluitie of blood, or other humours, dissolued by some extreame heat, and resorting downe the breast,

paining

paining the horse, so as he cannot wel goe. The cure wherof according to Rusius is thus. Let him bloud on both sides of ỹ brest in the accustomed veines, and rowell them vnder the breast, and twise a day turn the rowelles, with your hand, to moue the humors that they may issue forth, & let him go so rowelled ỹ space of fifténe daies.

## Of the paine of the heart called *Anticor*, that is to say, contrarie to the heart. Chap. lxxviii.

This procédeth of abundance of rank bloud bred with good féeding and ouermuch rest: which bloud resorting to the inward parts doth suffocate the heart, and many times causeth swellings to appeare before the breast, which wil grow vpward to ỹ neck & then it killeth ỹ horse. The signes. The horse wil hãg down his head in the manger, forsaking his meate, & is not able to lift vp his head. The cure according to Martin is thus. Let him bloud on both sides aboundanly in the plat veines, and then giue him this drink: take a quart of malmesie, & put therunto halfe a quarterne of sugar, & two ounces of Cinamon, and giue it him lukewarme: then kéep him warm in ỹ stable, stuffing him wel about ỹ stomach that ỹ wind offēd him no maner of way, & giue him warm water with mault alwaies to drink, & giue him such meat as hée wil eate. And if the swelling doe appeare, then besides letting him bloud, strike the swelling in diuers places with your fleame that the corruption may goe forth: and annoint the place with warme hogs grease, and that wil either make it to weare away, or else to grow to a head, if it bee couered and kept warme.

## Of tired horses. Chap. lxxix.

Because wee are in hande heere with the vitall partes, and that when the horses bee tired with ouer much labour, their vitall spirits ware féeble, I thinke it best to speake of them euen heere, not with long discoursing as Vegetius vseth but briefly to shew you how to refresh ỹ poore horse hauing need thereof, which is done chiefly by giuing him rest, warmth

and good feeding, as with warme mashes and plentie of prouender. And to quicken his spirits it shal be good to powre a litle oile and vineger into his nostrils, & to giue him the drinke of sheepes heads recited before in ỹ chapter of the consumption of the flesh, yea and also to bathe his legs with this bath: take of mallows, of sage, of each two or three handfuls, and a rose cake: boile these things together, and being boiled, then put vnto it a good quantitie of butter or of sallet oile. Or else make him this charge: take of bole Armonie and of wheat flower of each halfe a pound, & a little Rosen beaten into powder, and a quart of strong vineger, and mingle them together, and couer all his legs therewith, and if it be in summer, turne him to grasse.

## Of the diseased parts vnder the midriffe, and first of the stomach. Chap. lxxx.

THe old Authors make mention of many diseases incident to a horses stomach, as lothing of meat, spuing vp his drink, surfetting of prouender, ỹ hungry euill, and such like, which few of our Farrers haue obserued: and therefore I wil briefly speak of as many as I think necessarie to be knowne, and first of the loching of meat.

## Of the loathing of meate. Chap. lxxxi.

A horse may loath his meate through the intemperature of his stomach, as for that it is too hot or too cold. If his stomach bee too hot, then most commonly it will either inflame his mouth and make it to break out in blisters, yea and perhaps cause some canker to breed there. The cure of all which thinges hath beene taught before. But if he forsake his meate only for very heate, which you shal perceiue by the hotnesse of his breath and mouth, then cole his stomach by giuing him colde water mingled with a litle vineger and oile to drinke, or else giue him this drinke. Take of milke, and of wine, of each one pinte, and put thereunto three ounces of Mel Rosatum, and wash all his mouth, with vineger and salt. If his stomach be too cold, then his haire will stare and stand right vp: which Absirtus and others were wont to cure, by giuing the horse good wine and oile to drinke,

and

and some would seeth in wine, Rewe, or Sage, some would adde thereunto white Pepper, and Myrrhe, some would giue him Onions and Roket seede to drinke with wine, some the blood of a young Sowe with wine. Absirtus would haue the horse to eate ỳ greene blades of wheat, if the time of the yeare wil serue for it. Columella saith that if a horse, or any other beast, doe loath his meat it is good to giue him wine, and ỳ seed of Gith, or else wine and stampt Garlike.

## Of casting out his drinke. Chap. lxxxii.

VEgetius sayth, that the horse may haue such a Palsie proceeding of cold in his stomach, as he is not able to keep his drinke, but many times to cast it out againe at his mouth. The remedy whereof is to let him blood in the necke, & to giue him cordial drinks, that is to say made of hot and comfortable spices, & also to annoint all his breast and vnder his shoulders with hot oiles, & to purge his head, by blowing vp into his nostrils, powders that prouoke neesing, such as haue bin taught you before.

## Of surfetting with glut of prouender. Chap. lxxxiii.

THe glut of prouender or other meat not digested, doth cause a horse to haue great paine in his body, so as he is not able to stand on his feet, but lieth down & weltereth, as though he had ỳ Bots. The cure whereof, according to Martins experience, is in this sort. Let him blood in ỳ neck, then trot him vp & downe for ỳ space of an houre, & if hee cannot stale, draw out his yard & wash it with a litle white wine, lukewarme, & thrust into his yarde either a bruised cloue of Garlike, or else a litle oile of Camomill, with a wax candle. If he cānot dong, then rake his fundament, & giue him this glister. Take of Mallowes, two or three handfuls, & boil them in a pottle of fair running water, & when ỳ mallows be sodden then straine it, and put thereunto a quart of fresh butter, & halfe a pinte of oyle Olive: and hauing receiued this Glister, lead him vp and downe, vntil he hath emptied his belly, then set him vp, and keepe him hungrie, the space of three or foure daies,

and ỹ haie that he eateth let it be sprinkled with water, & let him drink warme water, wherein would be put a little braune, and when he hath drunk, giue him the braune to eate, and giue him litle or no prouender at al, for the space of eight or ten dates.

## Of another kind of surfetting with meat or drink, called of vs, foundering in the body. Chap. lxxxiiii.

This disease is called of the olde writers in Greeke Crithiasis, in Latine Hordiatio: it commeth, as they saye, by eating of much prouender suddenly after labour, whilest ỹ horse is hotte and panting, whereby his meate not being digested, breedeth euill humours, which by litle and litle doe spread through his members, and at length doe oppresse all his body & do cleane take away his strength, and make him in such case as he can neither go, nor bow his ioints, nor being layd is able to rise againe, neither can he stale but with great paine. It may come also, as they say, of drinking too much in trauelling by ỹ way when the horse is hot, but then it is not so dangerous, as when it commeth of eating too much. But howsoeuer it commeth, they say all, that the humours will immediatly resorte downe into the horses legs, and feet, and wil make him to cast his houes: and therefore I must needes iudge it to be no other thing but a plain foundering, which word foundering is borrowed, as I take it, of the French word Fundu, that is to say molten. For foundering is a melting or dissolution of humors, which ỹ Italians call Infusione. Martin maketh diuers kinds of foundering, as the foundering of ỹ body which the French men call most commonly Morfundu, and foundering in the legs and feet, also foundering before and behind, which som authors do denie, as Magister Maurus, & Laurentius Rusius, affirming that ther are fewer humours behind than before, and that they cannot easily be dissolued or molten, being so farre distant from the heart, and the other vitall parts. Whereunto a man might answere, that the natural heat of the heart doth not cause dissolution of humours, but some vnnaturall and accidentall heate, spredde throughout al ỹ members, which is dayly proued by good experience. For we see horses to be foundered not only before or behind,

but

but also of all foure legs at once, which most cómonly chanceth either by taking colde suddenly after a great heate, as by standing still vpon som colde pauement, or abroad in the cold wind: or else for that perhaps the horse trauelling by the way, and being in a sweate, was suffered to stand in some showlde water whilest he did drink, which was worse than his drinking: for in the meane time the colde entring at his féete, ascended vpward, and congealed the humors which the heat before had dissolued, and thereby when he commeth once to rest, hee waxeth stiffe & lame of all his legges. But leauing to speake of foundering in the legges, as wel before as behind, vntill we come to the griefs in the legges and féet, we intend to talke héere onely of foundering in the bodie, according to Martins experience. The signes to know if a horse be foundered in his body, be these. His haire wil stare, and he wil be chil, and shrug for colde, and forsake his meat, hanging downe his head, and quiuer after cold water, and after two or thrée dayes he wil begin to cough. The cure, according to Martin, is thus. First scowre his bellie with the glister last mentioned, and then giue him a comfortable drink made in this sort. Take of Malmesie a quart, of Suger halfe a quarterne, of honny halfe a quarterne, of Cynamon half an ounce, of Licoras and Annis séeds, of ech two spoonefuls, beaten into fine powder, which being put into the Malmesie, warme them together at the fire, so as the honny may be molten, and then giue it him lukewarme. That done, walke him vp and downe in the warme stable the space of halfe an houre, and then let him stand on the bit two or thrée houres without meate, but let him bee warme couered, and well littered, and giue him hate sprinkled with a litle water, and cleane sifted prouender by a litle at once, and let his water be warmed with a litle ground Mault therin. And if you sée him somewhat chéered, then let him bloud in the necke, and also perfume him once a day with a little Frankincense, and vse to walke him abroad when the weather is faire and not windy, or else in the house if ỹ weather be foule: and by thus vsing him you shall quickly recouer him.

Of

## Of the hungrie euill. Chap. lxxxv.

THis is a great desire to eat, following some great emptines, or lacke of meat, & it is called of ỳ old Authors by the Greeke name Bulimos, which is as much to say as a great hunger: proceeding, as ỳ Physicians say, at the first of som extream outward cold, taken by long trauelling in cold barren places, & specially where snow aboundeth, which outward colde causeth ỳ stomach to be cold, & the inward powers to be feeble. The cure, according to Absirtus & Herocles, is in ỳ beginning to comfort the horses stomach, by giuing him bread sopt in wine. And if you bee in a place of rest, to giue him wheat flower, and wine to drinke, or to make him cakes or balls of flower & wine kneaded together, & to feed him with that or with wine & nuts of pine trees. Herocles saith, if any such thing cũme by ỳ way whereas no flower is to be had, then it shal be best to giue him wine & earth wrought together either to drinke, or else to eate in balles.

## The disease in the liuer. Chap. lxxxvi.

ALl the olde Authours speake much of the paine in the liuer, but none of them do declare whereof it commeth, or by what meanes, sauing that Hippocrates saieth, that some horses get it by violent running vppon some stony or harde ground. I for my part thinke that the liuer of a horse is subiect to as many diseases as the liuer of a man, and therfore may be pained diuersly. As sometime by the intemperatenesse of the same, as for that it is perhaps too hot, or too cold, too, moist, or too dry: sometimes by meanes of euill humors, as choler, or flegme abounding in the same, according as ỳ liuer is either hot or cold: for heate breedeth choler, & cold flegme, by meanes of which intemperature procedeth al the weakenes of the liuer. It may be pained also sometime by obstruction and stopping, and sometime by hard knobs, inflammation, apostume, or vlcer bred therein, sometime by cõsumption of the substance therof. The signes of heate and hot humors, be these: lothing of meat great thirst and lowsenes of the belly, voiding dung of strong sent, cleanesse of bodie. The signes of cold, & cold humors be these: appetite to meate

without

without thirst, belly neither continually lose nor stiptike, but betweene times, no strong sent of dung, nor leanneſſe of bodie: by which kinde of signes, both first and last mentioned, & such like, the weakenes of the liuer is also to bee learned and sought out. Obstruction or stopping most commonly chanceth by trauelling or labouring vpon a full stomach, wherby the meate not being perfectly digested, breedeth grosse and tough humors, which humors by vehemencie of the labor, are also driuen violently into the small veines, wherby the liuer should receiue good nutriment, and so breedeth obstruction & stopping. The signes whereof in mans body is heauinesse and distension, or swelling, with some griefe in the right side vnder the short ribs, and especiallie when he laboureth immediatly after meate: which signes I beleeue if it were diligently obserued, were easie inough to find in a horse, by his heauie going at his setting forth, & often turning his head to the side greeued. Of an old obstruction, & specially if the humors be cholerike, breedeth many times a hard knobbe on the liuer, called of the Physicians Scirrhus, which in mans bodie may be felt, if the body be not ouer fatte, and it is more easie for him to lie on the right side than on the left, because that lying on the left side, the weight of the knob would oppresse the stomach and vitall parts very sore: by which signes me thinks a diligent Ferrer may learn, whether a horse hath any such disease or not. The inflãmation of ỹ liuer commeth by meanes that the blood either through ỹ abundance, thinneſſe, boiling heate, or sharpeneſſe therof, or elſe through the violence of some outward cause, breaketh out of the veines, and floweth into ỹ bodie of the liuer and there being out of his proper vessels doth immediatlie putrifie and is inflamed, and therwith corrupteth so much fleshie substance of the liuer as is imbrued withall, and therefore for the most part, the hollowe side of the liuer is consumed: yea, and sometime the full side. This hot bloudy matter then is properly called an inflammation, which by naturall heat is afterwarde turned into a plain corruption, & then it is called an impostume, which if it breake out and runne, then it is called an vlcer, or filthie sore. Thus you see, of one euill fountaine may spring diuers griefs, requiring diuers cures. And though none of mine authors

nor

nor any other Ferrer that I know haue waded thus far, yet I thought good by writing thus much, to giue such Ferrers as be wise, discreet, and diligent, occasion to seeke for more knowledge and vnderstanding than is taught them: and me thinks that it is a great shame, that the Ferrers of this age should not knowe much more than the Ferrers of old time, sith that besides that the old mens knowledge is not hidden frō them, they haue also their owne experience: and time also bringeth euerie day new things to light. But now to proceede in discoursing of the liuer, according to ẏ physicians doctrine as I haue begun, I say then of an inflāmation in the hollow side of the liuer, the signes bee these: loathing of meat, great thirst, laxenes of belly, easie lying on the right side, and painefull lying on the left. But if the inflāmation be on the fal side or swelling side of the liuer, then the patient is troubled with difficultie of breathing, with a drie cough, and grieuous pain, palling and twitching the windpipe, and to lie vpon the right side is more painful than on the left, and the swelling also may be felt with a mans hand. But you must vnderstand by ẏ way, that all these things last mentioned bee the signes of some great inflāmation, for small inflāmations haue no such signes but are to bee iudged onely by griefe vnder the short ribs and long fetching of the breath. The signes of Apostumation is painefull and great heate. The signes of Ulceratiō is decrease of the heat with feebleneese and fainting. For the filthy matter flowing abroad with euill vapours, corrupteth the hart, and many times causeth death. The signes of ẏ consumption of the liuer, shal be declared in the next chapter, and as for the curing of all the other diseases before mentioned, experience must first teach it ere I can write it. Notwithstanding, I cānot think but that such things as are good to heale ẏ diseases in mans bodie are also good for a horse, for his liuer is like in substance and shape to a mans liuer, differing in nothing but onely in greatnesse. And therefore I would wish you to learne at the Physicians hands, which I am sure first, as touching the weaknesse of the Liuer, proceeding of the vntemperatenesse thereof, will bid you to heale euerie such vntemperatenesse by his contrary: that is to say, heate by cold, and drinesse by moisture: and so

contra-

contrary. And therefore it shall bee very necessary for you to learne the qualities, natures, and vertues of herbes, drugges & al other simples, and how to apply them in time. And for to heale the obstruction of the Liuer, they wil counsel you perhaps to make the horse drinkes of such simples as these be, Agrimony, Fumitory, Camamil, Wormewood, Licoras, Annis seedes, Smallage, Persly, Spiknard, Gentian, Succory, Endine, Sperage, Lupins, the virtues whereof you shal learn in the herbals: but amongst al simples, there is none more praised than the Liuer of a Wolfe beaten into powder, & mingled in any medicine that is made for any disease in the Liuer. The cure of an inflammation consisteth in letting bloud, and in bathing, or fomenting the sore place with such herbes and oiles, as may mollifie & dispense humors abroad, wherwith some simples that be astringent would bee alwaies mingled: yea, & in al other medicines that be applied to ỹ Liuer, for any manner of diseases. Simples that mollify and dispense bee these, Linseede, Fengreeke, Camamel, Annis seedes, Melilot: and such like thinges. Simples astringent be these: red Rose leaues: Brimble leaues: Wormewood: Plantaine: Myrrhe: Mastick: Storax: & such like. Apostumes are to be ripened and voided. Ulcers must be cleansed: & scowred downward either by the belly or by Urine, and therefore the vse of such simples as prouoke vrin in such cases is necessary. The old writers of horseleach craft do say, that when a horse is grieued in his liuer, hee wil forsake his meate, and his body wil waste, his mouth wil be dry, his tongue rough and harsh: yea, and it wil swel, and he wil refuse to lie on that side where his griefe is. The cure wherof, according to Abstirtus is in this sort. Let him drink stampt Ireos, with wine alaied with water. He praiseth also an hearb much like vnto Calamint: called of Pliny, Polymonia, or let him drinke Sauery with wine and oile. I thinke that Agrimony or liuer wort is as good as ỹ best of them. Abstirtus would haue his body to be chafed with wine and oile mixt togither: and to be wel littered that hee may lie soft: and his prouender that should be giuen him, to be steeped first in warm water: and now and then some Nitrum to bee put in his drinke.

## Of the consumption of the Liuer. Chap. lxxxvii.

I Beléeue that no inwarde member of a Horse doth suffer so much, as the lunges and liuer, and that not so much by continuall, as by vnordinate, and vnseasonable trauell, labour and exercise, whereby either the Horses lunges or his liuer doe most commonly perish, and is consumed: yea, and sometime both Of the consumption of the lungs, we haue talked sufficiently before: therfore let vs shew you heere the causes whereof the consumption of the liuer procéedeth. The physicians say, that it may come of any humor, but chiefly and most commonly of cholerick matter, shed throughout the substance of the liuer, which putrifying by little and little, and leisurely, doth at length corrupt, and perish all the substance of the liuer, which thing in mans bodie doth first procéede, as the Physicians say, either by eating corrupt meats, or else by continuall drinking of swéete wines. But me thinkes that the consumption of a horses liuer, should come by some extreame heat, inflaming the bloud, which afterward being putrified, doth corrupt and exulcerate the substance of the liuer. For after inflammation, as I said before, cõmeth apostumation, and then exulceration, which is very hard to cure, because the substance of the Liuer is spongeous like vnto the Lunges. And whilest the liuer is so corrupted, there can be no good digestion, for lack wherof the body receiueth no good nutriment, and therfore must néeds also languish and consume. The signes, according to Martin, be these: The horse wil forsake his meat, and wil stand stretching himselfe in length, and neuer couet to lie down, and his breath wil be so strong, as no man can abide it, and he wil continually cast yellowish matter at the one nostril, or else at both, according as one or both sides of the liuer is corrupted, and on that side that he casteth, hee wil haue vnder his law, euen about the midst therof a knob or kirnel as much as a Walnut, which when Martin findeth, he cõmitteth his carcas to the crowes, taking him to be past cure. But if hee were let bloud in time, & had such drinkes giuen him, as are good to comfort and strengthen the liuer, he thinketh that the horse might bee recouered. I neuer read any medicine for the wasting of the Liuer, as I remember, but this onely diet, which I found in an old

English

English book. Let him drink for the space of three daies no other thing but warm wort, and let him eate no other meat but Otes baked in an oven, and let him stand meatlesse the first night before you giue him the wort. But I thinke it were not amisse to put into the wort that he drinketh euery morning som good confection or powder made of Agrimony, red rose leaues, Saccharum Rosaceum, diarchadon, Abbatis, Diasantalon, Licoras & of the liuer of a woolfe, and such other simples as do comfort and strengthen the liuer, or else to giue him the same thinges with Goats milke lukewarme.

## Of the diseases in the Gall. Chap. lxxxviii.

In my opinion ỹ gall of a horse is subiect to diuers diseases, as well as ỹ gall of a man as to obstruction, wherof commeth fulnesse & emptines of the bladder therof & also ỹ stone in ỹ gal. But obstruction may chance two maner of waies. First, when ỹ way wherby ỹ choler should proceed from the liuer vnto the bladder of the gall as vnto his proper receptacle is stopped, and thereby the bladder remaineth empty, whereof may spring diuers euil accidents: as vomiting, the laxe or bloudy flixe. Secondly, when the way wherby such choler should issue forth of the bladder of ỹ Gall downe into ỹ guts is shut vp, wherby the bladder is ouer full & abounded with to much choler, which causeth heauines, suffocation, belching, heat, thirst, & disposition to angrines. The signes of both kindes of obstruction in ỹ gall is costiuenesse and yellowishnes of skin, infected with ỹ yellow taundis. The stone in ỹ gall which is somwhat blackish proceedeth of the obstructiõ of the conduits of ỹ bladder, wherby the choler being long kept in wareth dry & turneth at length to hard grauel or stones, wherof because ther is neither signes nor any grieuous accidẽt knowen to the Physicians I leaue to talke any farther thereof, and the rather for that none of mine authors do make any mention of the gall at all. Notwithstanding to giue som light vnto ỹ vnlearned Ferrers, and that they may the better vnderstand ỹ inward parts of a horse I thought good to write thus much, thinking it no time lost while I may profite them anie way.

Of

## Of the diseases in the splene. Chap. lxxxix.

The splene, as I said before in the kepers office, is the receptacle of melancholy, and of the dregs of blood, and is subiect to the like diseases that the liuer is, that is, to say, to swelling, obstruction, hard knob, and inflãmation: for the substance of the splene is spongeous, and therefore apt to sucke in al filth and to dilate it selfe, wherefore being ful it must nedes swel, which wil appeare in the left side vnder ỹ short ribs, and such swelling causeth also shortnesse of breath & specially when the body doth labour or trauel. It is painful also to lie on the right side, because the splene being swollen so oppresseth the midriffe, and specially when the stomach is ful of meat, and the patient hath worse digestion than appetite, and is troubled with much wind, both vpward & downward. Moreouer, the vapour of the humour doth offend the heart, making it faint, & causeth al the body to bee heauy and dul: and if such swelling be suffered to goe vncured, then if it be a melancholy humour, and abounding ouermuch, it waxeth euery day thicker and thicker, causing obstruction not only in the veines and artires, which is to be perceiued by heauinesse & griefe on ỹ left side, but also in the splene it selfe, where as by vertue of the heate it is hardened euery day more and more, and so by litle and litle waxeth to a hard knob, which doth not only occupy al the substance of the splene, but also many times al the left side of the womb, & thereby maketh al the euil accidentes or griefes before recited much worse than they were. Now as touching ỹ inflãmation of the splene which chanceth very seldome, forsomuch as euery inflãmation procedeth of pure blood, which seldome entereth into ỹ splene: I shall not ned to make many wordes, but referre you ouer to the Chapter of the Liuer: for in such case they differ not, but procéding of like cause haue also like signes, & doe require like cure. The old writers say, that horses be often grieued with griefe in the splene, and specially in summer season with grédy eating of sweete grene meats, and they cal those horses Lienosos, that is to say splentik. The signes wherof (say they) are these, hard swelling on the left side, short breath, oft groning, and grédy appetite to meate. The remedy wherof, according to Absirtus

is

is to make the horse to sweat once a day during a certain time, by riding him or otherwise trauelling him, and to powre into his left nostril euery day ỹ iuice of Mirabolans mingled with wine and water, amounting in all to the quantitie of a pinte. But me thinks it would doe him more good, if he dranke it as Hierocles would haue him to doe. Eumelius praiseth this drinke: take of cummin séede and of hony, of ech fiue ounces, and of Lacerpitiũ as much as a bean, of vineger a pint, and put all these into thrée quartes of water, and let it stand so all night, and the next morning giue ỹ horse to drink therof, being kept ouer night fasting. Theomnestus praiseth the decoction of Capers, especially if the barke of the rot thereof may be gotten sodden in water to a sirrop. Or else make him a drink of Garlik, Nitrum, Horehound and Wormewood, sodden in harsh wine: and he would haue the left side to be bathed with warme water, and to be hard rubbed. And if all this wil not help, then to giue him the fire: which Absirtus doth not allow, saying that the splene lieth so, as it cannot easily be fired, to doe him any good. But for so much as the liuer and splene are members much occupied in the ingendering and separating of humors, many euil accidents and griefs doe take their first beginning of them, as the Iandis, called in a horse, the Yellowes, drinesse of body, and consumptiõ of the flesh, without any apparant cause why, which ỹ Physicians cal Atrophia, also euil habite of the body, called of them Cachexia, and the dropsie. But first we wil speak of the Iandis or yellowes.

## Of the yellowes. Chap. xc.

The Physicians in mans body do make two kinds of Iandis: ỹ is to say, ỹ yellow procéeding of choler dispersed throughout ỹ whole body, & dying the skin yellow, & ỹ black procéeding of melãcholy dispersed likewise throughout the whole body, & making al the skin black. And as the yellowe Iandis commeth for the most part, either by obstruction or stopping of the conduites belonging to the bladder of ỹ Gal, which (as I said before) is ỹ receptacle of Choler, or by som inflãmation of the liuer, wher-

by the blood is conuerted into Choller, and so spreadeth throughout the body: euen so the blacke Jandis commeth by meanes of some obstruction in the liuer veine, that goeth to the splene, not suffering the splene to do his office, in receiuing the dregs of the blood from the liuer, wherein they abound too much, or else for that the splene is already too ful of such dregs, and so sheddeth them backe againe into the veines. But as for ỹ black Jandis they haue not bẽn obserued to be in horses as in men, by any of our Ferrers in these dates that I can learn. And yet the old writers of horseleachcraft, doe seme to make two kinds of Jandis, called of them Cholera, that is to say, the drie Choler, and also the moist choler. The signes of ỹ dry choler, as Absirtus saith, is great heate in the body, and costiuenesse of the belly, wherof it is sayd to be drie. Moreouer, the horse wil not couet to lie down, because he is so pained in his body, and his mouth wil be hot and drie. It commeth, as he saith, by obstruction of the cõduit, whereby the choler shuld resort into the bladder of the gal, and by obstruction also of the vrine vessels, so as he cannot stale. The cure, according to his experience, is to giue him a glister made of oile, water, and Nitrum, and to giue him no prouender, before that you haue raked his fundament, & to powre out ỹ decoction of Mallowes mingled with swẽt wine into his nostrils, & let his meat be grasse, or else swẽt hai sprinkled with Nitre and water, and he must rest from labour, and bee often rubbed. Hierocles would haue him to drink the decoction of wilde Colewortes sodden in wine. Again of the moist choler of Jandis, these are the signes. The horses eies will loke yellowe, and his nostrils wil open wide, his eares and his flanks wil sweat, and his stale wil be yellowe and cholerick, and he wil grone when hee lyeth downe: which disease the said Absirtus was wont to heale, as he saith, by giuing ỹ horse a drink made of Tyme & Cumin, of ech like quantitie stampt together, & mingled with wine, hony, and water, and also by letting him blood in the pasternes. This last disease seemeth to differ nothing at al from that which our Ferrers call the yellowes. The signes whereof, according to Martin, be these. The horse wil be faint, and sweat as he standeth in the stable, and forsake his meate: and his eyes, and the

insides

inside of his lips and all his mouth within will bee yellowe. The cure wherof according to him is in this sort. Let him blood in the necke veine, a good quantitie, and then giue him this drinke: take of white Wine, or of Ale, a quart, & put thereunto of Saffron, turmericke, of ech half an ounce, and the iuice that is wrung out of a great handful of Celondine, and being luke warme, giue it the horse to drink, and keep him warme the space of three or foure daies, giuing him warme water with a little bran in it.

## Of the euil habite of the body, and of the dropsie. Chap. xci.

As touching the drinesse and consumption of the flesh, without any apparant cause why, called of the Physicians as I saide before Atrophia, I knowe not what to say more than I haue sayde already before in the Chapter of Consumption of the flesh, and therefore resort thither. And as for the euill habite of the body, which is to be euill coloured, heauie, dull, and of no force, strength, nor liuelinesse, it commeth not for lacke of nutriment, but for lacke of good nutriment, for that the bloud is corrupted with flegme, choler, or melancholy, procéeding either from the splene, or else through weaknesse of the stomach or Liuer, causing euil digestion, or it may come by foule féeding: yea, and also for lacke of moderate exercise. The euil habit of the body, is next cosin to the dropsie, wherof though our Ferrers haue had no experience, yet because my old authors writing of horseleachcraft do speake much therof, I thinke it good heere briefly to shew you their experience therein, that is to say, how to know it, and also how to cure it. But sith none of them do shew ẏ cause whereof it procédes, I thinke it méet first therfore to declare vnto you the causes therof, according to the doctrine of the learned Physicians, which in mans body doe make three kinds of dropsies, called the first Anasarca, the second, Ascites, and the thirde, Tympanias. Anasarca, is an vniuersal swelling of ẏ body through the abundance of water, lying betwirt the skin and ẏ flesh, & differeth not from ẏ disease last mentioned, called Cachexia, that is to say, euil habit of ẏ body, sauing that the body is more swolne in this than in Cachexia, albeit they procéede both of like causes

as of coldnesse and weakenesse of the liuer, or by means that the heart, splene, stomach, and other members seruing to digestion, be grieued or diseased. Ascites is a swelling in the couering of ỹ belly, called of the Phisicians, Abdomen, comprehending both the skin, the fat, eight muscles, and the filme or panicle called Peritoneum, through ỹ abundance of som whayish humor entred into ỹ same, which besides the causes before alledged, procedeth most chiefly by means that some of ỹ vessels within bee broken or rather cracked, out of the which, though ỹ bloud being somewhat grosse cānot issue forth, yet ỹ whaiysh humor being subtill, may run out into ỹ belly, like water distilling through a cracked pot. Tympanias called of vs commonly ỹ Tympanie, is a swelling of the aforesaid couering of ỹ belly, through the abundance of wind entred into ỹ same, which wind is ingendred of crudity and euil digestion: and whilest it aboundeth in the stomach, or other intrails, finding no issue out, it breaketh in violētly through the small conduits among the panicles of the said couering, not without great paine to the patient, and so by tossing to and fro, windeth at length into the space of ỹ couering it selfe. But surely such wind cannot bee altogither void of moisture. Notwithstanding, the body swelleth not so much with this kind of dropsy as with the other kind called Ascites. The signes of ỹ dropsy be, shortnesse of breath, swelling of the body, euil colour, lothing of meate, and great desire to drinke, and specially in the dropsy called Ascites, in which also ỹ belly wil sound like a bottle halfe ful of water: but in the Tympany, it wil sound like a Taber. But now though mine Authors make not so many kindes of dropsies, yet they say al generally, that a horse is much subiect to the dropsy. The signes, according to Absirtus, & Hierocles, be these. His belly, legges, and stones, will be swollen: but his backe, buttockes, and flankes, will be dried and shrunke vp to ỹ very bones. Moreouer, the veines of his face and temples, and also the veins vnder his tongue wil be so hidden, as you cānot see them: and if you thrust your finger hard against his body, you shall leaue the print thereof behinde, for the flesh lacking natural heat wil not returne again to his place, & when the horse lieth down he spreadeth himself abroad, not being able to lye round together

on

on his belly, and the haire of his backe by rubbing will fall away. Pelagonius in shewing the signes of the dropsie, not much differing from ỳ Physicians first recited, seemeth to make two kinds thereof, calling the one the Tympanie, which for difference sake may be called in English the winde dropsie, and the other ỳ water dropsie. Notwithstanding both haue one cure, so far as I can perceiue: which is in this sort. Let him be warm couered, & walked a good while together in the sunne to prouoke sweat, and let all his body be wel and often rubbed alongst the haire, and let him feed vpon Colworts, smallage, and Elming boughes, & of all other things that may losen the belly, or prouoke vrine, and let his common meat be grasse if it may be gotten: if not, then hay sprinkled with water and Nitrũ. It is good also to giue him a kind of pulse called Cich, steeped a day and a night in water, and then taken out, and laid so as the water may drop away frõ it. Pelagonius would haue him to drinke parsly slãpt with wine or the rot of the hearbe called in Latin Panax, with wine. But if the swelling of the belly wil not decrease for al this, then slitte a litle hole vnder his belly a handful behind the nauil, and put into that hole a hollowe reed or some other pipe, that the water or winde may go out, not all at once, but by litle and litle and at diuers times, and beware that you make not the hole ouer wide least the caule of the belly fall downe thereunto, and when all the water is cleane runne out, then heale vppe the wound as you doe all other wounds, and let the horse drink as litle as is possible.

## Of the diseases in the guttes of a horse, and first of the Cholike. Chap. xcii.

The guts of a horse may be diseased with diuers griefs: as wt ỳ cholicke, wt costiuenesse, with ỳ Lax, with ỳ bloudy flixe & wormes. The cholike is a grieuous pain in ỳ great gut, called of ỳ Physitiãs Colon, wherof this disease taketh his name: which gut, because it is very large & ample, & ful of corners, it is apt to receiue diuerse matters, and so becommeth subiect to diuerse griefs. For somtime it is tormented with the abundãce of grose

humors gotten betwixt the panicle of the said gut, and sometime with wind hauing no issue out, sometime with inflammatiõ, and sometime with sharp fretting humours. But so farre as I can learne, a horse is most commonly troubled with the cholike that commeth of wind, and therof our Ferrers do tearme it the wind cholicke. The signes whereof be these. The horse wil forsake his meat, and ly downe and wallow and walter vpon the ground, and standing on his fẽt he will stampe for verie paine with his forefẽt, and strike at his belly with his hinder fote and looke often towards his belly, which also towards the flanks wil swel, & seeme greater to the eye thã it was wont to be. The cure wherof according to Martin, is in this sort: take a quart of malmesie, of cloues, pepper, Cynamon, of ech halfe an ounce, of sugar half a quarterne, and giue it the horse luke warme, and annoint his flanks with oile of Baie & then bridle him, and trot him immediatly vppe and downe the space of an houre, vntill he dung, and if he wil not dung, then rake him, and if nẽd be prouoke him to dung, by putting into his fundament an onion pilled and iagged wit a knife crosselwise, so as the iuice thereof may tickle his fundament, and for the space of three or foure daies let him drink no cold water, and let him be kept warm. Rusius was wont to vse this kind of cure: take a good big rẽd a span long or more, and being annointed with oyle, thrust it into the horses fundament, fastening the outward end thereof vnto his taile, so as it cannot slip out, and then hauing first annointed and chafed all the horses belly with som hot oyle, cause him to be ridden somwhat hastily vp and down some hilly ground, and that wil make him to void the wind out of his belly through the rẽd: which done, let him be kept warme, and fed with good prouender, and warme mashes made of wheate meale, and fennell sẽde, and let him drinke no cold water vntill he be whole. Absirtus would haue you to giue him a glister made of wild Cucumber, or else of hennes dung, Nitrum and strong wine.

## Of Costiuenesse, or bellie bound. Chap. xciii.

COstiuenesse is when a horse is bound in ỹ belly and cannot dung, which may come by glut of prouender, or ouermuch

sẽring

feeding and rest, whereof we haue talked sufficiently before: also by wind, grosse humors, or colde causing obstruction, and stopping in the guttes. The cure whereof, according to Martin, is in this sort. Take of the decoction of Mallowes a quart, and put thereunto halfe a pint of oyle, or in steed thereof, halfe a pinte of fresh butter, and one ounce of Benedicte laxatiue, & powre that into his fundament, with a litle horne meet for the purpose, that done, clap his taile to his fundament, holding it still with your hand, whilest another dooth lead him in his hand, and trot him vp and downe, that the medicine may worke the better: and hauing voided all that in his belly, bring him into the stable, and there let him stand a while on the bit well couered, and warme littered, and then giue him a litle haie, and let his drink be warmed, it shall not be amisse also to giue him that night a warme mash.

## Of the Laxe. Chap. xciiii.

The Italians call this disease Ragiatura, and the horse that hath this disease Cauallo arragiato, or Sforato. It may come through the abundance of cholerike humours descending from the liuer, or gall, downe to the guttes. But Rolsius sayth, that it commeth most commonly, by drinking ouermuch colde water immediatly after prouender, or by sudden trauelling vpon a full stomach, before his meat be digested, or by hastie running, or galloping immediatly after water. If this disease continue long, it will make the horse very weake, and feeble, so as he shal not be able to stand on his legges. Notwithstanding, such nature feeling her self oppressed, endeuoureth thus to ease her self by expelling those humours that grieue her, I would wish you suddenly to stop it, least some worse inconuenience growe thereof. But if you see that the horse loseth his flesh, and waxeth more dull and feeble than he was wont to bee, then giue him this drink often experimented by Martin, & that shal stop him: take of beane flower, and of bole Armonie of eche a quartern, mingle these things together in a quart of red wine and giue it him lukewarme, and let the horse rest and bee kept warme, and let him drink no cold drink but lukwarme, and put

therein a little Beane flower, and let him not drink but once a day, and then not ouermuch for the space of three or foure daies.

## Of the bloudy flixe. Chap. xcv.

IT seemeth by the old writers, that a horse is also subiect to the bloudy flixe. For Absirtus, Hierocles, and Democritus, say all with one voice, that the guttes of a Horse may bee so exulcerated, that he will void bloudy matter at his fundament: yea, and his fundament therewith will fall out, which disease they call Disenteria, which is as much to say, as a painefull exulceration of the guttes: vnder the which ỹ old men, as it séemeth by the words of Hierocles, & Absirtus, would comprehend the disease called of the Phisicians Tenasmus, that is to say, a desire to dung often, and doe but little, and that with great pain: And also another disease called Procidentia ani, that is to say, the falling out of the fundament, which ỹ Phisicians doe account as seuerall diseases. Notwithstanding, forsomuch as Dysenteria, and Tenasmus, doe spring both of like causes: yea, and also for that the falling out of the fundament hath some affinitie with them, I wil follow mine authors, in ioining them altogither in this one Chapter. The phisicians make diuerse kindes of bloudy Flix, for sometime the fatte of the slimie filth which is voided, is sprinkled with a little bloud, sometime ỹ matter that voideth is mixt with the scrapings of the guts, and sometime it is waterish bloud, like water wherein bloudy flesh hath beene washed, and sometime bloud mixt with melancholy, and sometime pure bloud: and by the mixture of the matter you shal know in mans body, whether the vlceration be in the inner smal guttes, or in the thick outward guttes: for if it be in the inner guttes, then ỹ matter and bloud wil be perfectly mixt togither: but if it be in the outward guttes, then they be not mingled togither, but come out seuerall, the bloud most commonly following the matter. Of this kind is that disease called before Tenasmus, for that is an vlcer in the right gut seruing the fundament, and doth procéede euen as the Flix doth, of some sharp humors, which being violently driuen, and hauing to passe through manie crooked and narrow waies, doe cleaue to the guttes, and

with

with their sharpnesse fret them, causing exulceration and grieuous paine. The Flix also may come of some extream cold, heat or moistnesse, or by mean of receiuing some vyolent purgation, hauing therein ouermuch Scamonie, or such like violet simple, or through weakenesse of the liuer, or other members seruing to digestion. Now as touching the falling out of the fundament, ỹ Phisicians say, that it commeth through ỹ resolution, or weaknesse of the muscles, seruing to draw vp the fundament, which resolution may come partly by ouermuch straining, and partly they may be loosned, by ouermuch moisture: for which cause, children being full of moisture are more subiect to this disease than men. And for the selfe same cause I think that horses hauing verie moist bodies, be subiect thereunto. Thus hauing shewed you the causes of the diseases before recited, I will shew you ỹ cure prescribed by ỹ old writers. Absirtus would haue ỹ fundament on the outside to be cut round about, but so as the inward ring thereof be not touched, for that were dangerous and would kill the horse, for so much as his fundamẽt would neuer abide within his bodie, & that done, he would haue you to giue him to drink ỹ powder of vnripe Pomgranat shels, called in Latin Malicorium, togither with wine or water, which indeede because it is astringent is not to be misliked: but as for cutting of the fundament, I assure you I cannot iudge what he should meane thereby, vnlesse it bee to widen the fundament, by giuing it long slits or cuttes on the outside, but wel I know that it may cause more paine, and greater inflammation. And therefore me thinks it were better in this case to follow the Phisicians precepts, which is first to consider whether the fundament being fallen out bee inflamed or not: for if it be not inflamed, then it shall be good to annoint it first with oile of Roses somewhat warmed, or else to wash it with warm red wine. But if it be inflamed, then to bath it well, first with a sponge dipt in ỹ decoction of Mallowes, Camamill, Linseede, and Feengreeke, and also to annoint it well with oile of Camamill and dill, mingled together, to asswage the swelling, and then to thrust it in again faire and softly, with a soft linnen cloth. That done, it shall be good to bathe al ỹ place about with redde wine, wherein hath beene sodden Acatium

Galles,

Galles, Acorne cups, parings of Quinces, & such like simples as be astringent, and then to throw on some astringent powder made of bole Armonie, Frãkincense, Sanguis Draconis, Myrrh, Acatium, and such like: yea, and also to giue the horse this drink much praised of all the old writers. Take of Saffron one oũce, of Myrrh two ounces, of the herb called in Latin Abrotonum, named in some of our English herbals Sothernwood, three oũces, of Parsly one ounce, of garden Rew, otherwise called herb Grace, three ounces, of Pirithenm, otherwise called of som spittlewort, and of Isop, of each two ounces, of Cassia which is like Cynamon, one ounce. Let all these things be beaten into fine powder, & then mingled with chalke, & strong vineger wrought into paste, of which paste make litle Cakes, and drie them in the shadow, & being dried, dissolue some of them in a sufficient quantitie of barly milk, or iuice, called of the old writers, and also of the Physicians Cremor Ptisane, and giue ỹ horse to drink therof with a horne: for the medicine, as the Authors write, doth not onely heale the bloudy Flix, and ỹ other two diseases before recited, but also if it be giuen with a quart of warm water, it will heale all griefe and paine in ỹ belly, and also of the bladder, that commeth for lacke of staling. And being giuen with swèt wine it wil heale the biting of any Serpent or mad dog.

## Of the wormes. Chap. xcvi.

IN a horses guttes doe breed three kindes of wormes, euen as there doth in mans body, though they be not altogether like in shape. The first long and round, euen like to those that Children doe most commonly voyde, and are called by the generall names, wormes. The second are litle wormes hauing great heads, and small long tailes like a nèedle, and bee called Bottes. The third be short and thicke like the ende of a mans litle finger, and therfore be called Troncheons, & though they haue diuers shapes according to the diuersitie of the place perhaps where they breed, or else according to the figure of the putrified matter whereof they breede: yet no doubt they proceed all of one cause, that is to say, of a rawe, grosse, and flegmatike matter apt to putrification, ingendred most commonly by

fowle feeding: and as they proceed of one self cause, so also haue they like signes, and like cure. The signes be these, the horse will forsake his meat, for the troncheons and the Bots wil couet alwayes to the mawe and paine him sore. Hee wil also lie downe and wallow, and standing he wil stampe and strike at his bellie with his hinder fot, and loke often toward his belly. The cure, according to Martin is thus: take of sweet milk a quart, of hony a quarterne, and giue it him lukewarm, and walke him vp and downe for the space of an houre, and so let him rest for that day, with as litle meat or drinke as may bee, and suffer him not to lie down. Then the next day giue him this drink: take of hearbe Grace a handfull, of sauine as much, and being wel stampt, put thereunto a litle Brimstone, and a litle sote of a Chimnie beaten into fine powder, and put al these things together in a quart of wort or new ale, and there let them lie in steepe ỹ space of an houre or two, then strain it wel through a faire cloth, and giue it the horse to drink luke warm, then bridle him and walk him vp and downe the space of an houre: that done bring him into the stable, and let him stand on the bit two or three houres, and then giue him a litle haie. Laurentius Russius saith, that it is good to giue the horse the warme guttes of a young hen, with a litle salt three daies together in the morning, and not to let him drink vntill it be none. Some say, that it is good to ride him hauing his bit first annointed with dung, comming hot from the man: some again vse to giue him a quantitie of Brimstone, and half asmuch Rosen beaten into powder and mingled together with his prouender, which he must eate a good while before he drinketh.

## Of the paine in the kidnies. Chap. xcvii.

ME thinkes that the kidnies of a horse should bee subiect to as many grieses as the kidnies of a man: as to inflammation obstruction, Apostumes, and Vlcers, and specially to obstruction that commeth by meanes of some stone or grauell gathered together in the kidnies, whereby the horse cannot stale but with paine: for I haue seene diuers horses my selfe ỹ haue voided much grauel in their stale, which without doubt did

did come from ye kidnies, but my Authors doe refer such grieses to the bladder and vrine, and write of no disease but onely of the inflammation of the kidneies, which is called of them Nephritis and so it is also called of the Physicians. It commeth, as they say by some great straine in leaping ouer some ditch, or else by bearing som great burthen. The signes wherof be these. The horse wil goe rolling behind, and staggering, his stones wil shrink vp, and his stale wil be blackish and thicke. I think this disease differeth not from that which we called before the swaying of ye back when we talked of the grieses in the backe and loines, and therefore resort thither. The cure of this disease, according to the best of the old writers is in this sort. Bathe his back and loines with wine, oile, and Nitrum warmed together, & after that you haue so bathed him, let him be couered with warm clothes, and stand littered vp to ye belly with strawe, so as he may lie soft, and giue him such drinks as may prouoke vrin, as those ye be made with Dill, Fenell, Annis, Smallage, Perslie, Spikenard, Myrrh, and Cassia. Some say it is good to giue him a kinde of pulse called Cich with wine. Some again do praise Ewes milke, or else oile and Deares sewet molten together to be giuen him to drink, or the rot of the hearb called Asphodelus, englished by some daffadill sodden in wine.

## Of the diseases belonging to the bladder and vrine of a horse. Chap. xcviii.

Herocles sayeth, that a Horse is subiect to three kindes of diseases incident to the bladder or vrine, the first is called Stranguria, the second Dysuria, the third Ischuria. Stranguria, otherwise called in Latine Stillicidium, and of our olde Ferrers, according to the French name Chowdepis, is when the horse is prouoked to stale often, & voideth nothing but a few drops, which cõmeth as the Physicians say, either through the sharpnesse of the vrine or by som exulceration of the bladder, or else by means of som apostume in the liuer or kidnies: which apostume being broken, the matter resorteth downe into the bladder, and with the sharpnesse therof causeth a continual prouocation of pissing. Dysuria is whē the horse cānot pisse but with

great labour and pain, which for difference sake I wil call from hencefoorth the paine pisse. It may come sometime through the weaknesse of the bladder and colde intemperature thereof, and sometime through the abundance of flegmatike, and grosse humours, stopping the neck of the bladder. Eschuria, is when the Horse cannot pisse at all, and therfore may be called the pissuppression, or suppressiō of vrine, whether you wil: me thinks alwaies the shorter and proper name is, ỳ better, & more easie it is to pronounce. It may come, as the Physicians say, by weakenesse of the bladder, or for that ỳ water conduit is stopt with grosse humors, or with matter descending from the Liuer or Kidnies, or with the stone: yea, and somtimes by meanes of some inflammation, or hard knob growing at the mouth of the conduit, or for that the sinewes of the bladder is numbed, so as the bladder is without fēeling: or it may come by retention, & long holding of ỳ water: most of which causes Hierocles also recites, adding thereunto, that it may chance to a horse through ouermuch rest and idlenesse, and also by means of some extreame cold, and specially in winter season, for the which the warmth of fire is a present remedy. But now mine Authours do not shew for euerie one of these three kinds of diseases seuerall signes, but onely say that when a horse cannot stale, he wil stand as though he would stale, and thrust out his yard a litle, and also for very paine stand beating his taile betwirt his thighes. Neither do they séeme to appoint seuerall cures, but do make a hotchpot, mingling them altogether, som of them praising one thing and som another: for some say it is good to mingle the iuice of Lékes with swéete smelling wine and oile together, and to poure it into his right nostril, and then to walk him vp and down vpon it, and that wil make him to stale. Some say it is good to giue him Smallage séede, or else the root of wilde Fenel, sodden with wine to drink, or to put fine sharpe Onions, cleane pilled, and somwhat bruised into his fundament, and to chase him immediatly vpon it, either by riding him or otherwise, and that shal cause him to stale presently. It is good also to bathe all his backe & loines with warm water. The scrapings of the inward parts of his owne hoones beaten into powder, and mingled with wine, & powred into his

right

right nostril wil make him to stale, if you chafe him vpon it, and the rather, as Hierocles saith, if you carry him to some shéepes coate, or other place where shéep are wont to stand, the smell of whose dung and pisse, without any other medicine, as hee sayth, wil prouoke him to stale. Som wil giue the horse white dogges dung dried, and mingled with salt, wine, and Amoniacū, to drinke some hogs dung onely with wine, and some ỹ dregges of horsepisse with wine, and many other medicines which I leaue to rehearse for feare of being too tedious, and specially, sith Martins experience follows here at hād, agreeing in al points with Laurētius Rusius cure, which is in this sort. First draw out his yard and wash it wel in white wine, and scoure it wel, because it will be many times stopped with dirt, and other baggage together, and hardened like a stone, and then put a litle oile of Camamill vnto the conduit with a wax candle, & a brused clone of Garlik, and that wil prouoke him to stale. And if that wil not helpe, then giue him this drink. Take of Parsly two handfuls, of Coriander one handfull, stampe them and straine them with a quart of white wine, and dissolue therein one ounce of cake Sope, and giue it lukewarme vnto ỹ horse to drink, and kéep him as warm as may be, and let him drinke no cold water for the space of fiue or sixe dayes, and when you would haue him to stale, let it bee either vpon plentie of strawe, or vpon some grésne plot, or else in a shéepes coate, the sauour wherof wil greatly prouoke him to stale, as hath bésne afore sayd.

## Of pissing bloud. Chap. xcix.

PElagonius saith, that if a horse bee ouermuch laboured, or ouer charged with beaute burthen, or ouer fat, hee will many times pisse bloud, and the rather, as I thinke, for that some veine is broken within the horses bodie, and then clére bloud wil come forth many times, as the Physicians say, without any pisse at al. But if the bloud be perfectly mingled together with his stale, then it is a signe that it commeth from the kidnies, hauing some stone therein, which through vehement labour, doth fret the kidnies and veins therof, and so cause them to bléd, through which while the vrine passeth it must nédes be infected,

infected, & died with the bloud. It may come also by som stripe, or from the muscle that incloseth the necke of the bladder. The cure, according to Pelagonius, Absirtus, Hierocles, & the rest, is thus. Let the horse bloud in the palat of the mouth, to conuert the bloud the contrarie way. Then take of Dragagant that hath bẽ steepes in wine, halfe an ounce, & of Poppie sẽd one dram & one scruple, & of Stirax as much, & twelue Pineapple kirnels: let al these things be beaten and mingled well together, and giue the horse thereof euery morning, the space of seuen daies, the quantitie of a hasell nut distempered in a quart of wine: me thinks that the quantity of a Walnut were to litle for so much wine. Some write that it is good to make him a drinke with ỹ rote of ỹ heard Asphodelus, which som cal Daffadil mingled with wheat flower, & Sumach sodden long in water, & so to be giuen the horse with som wine added therunto, or make him a drink of Goats milke, & oile, straining therinto a litle Frumentie. Anatolius saith, that it is good to giue ỹ horse three daies together, sodden beans clean pilled, wherunto wold be added some Deeres sewet and a litle wine.

## Of the Colt euill. Chap. C.

THis name Colt euill, in my iudgement, doth properly signifie that disease, which the Physicians call Priapismus, which is a continuall standing, together with an vnnaturall swelling of the yard, proceeding of some wind, filling the artires, and hollow sinew or pipe of ỹ yard, or else through the abundãce of sẽd: which doth chance oftentimes to man, & I thinke sometime to stoned horses. Notwithstanding, Martin saith, that the colt euil is a swelling of the sheath of the yard, & the part of ỹ belly thereabout, caused of corrupt sẽd comming out of ỹ yard, & remaining within the sheath where it putrifieth. And Geldings most cõmonly are subiect to this disease, not being able for lack of natural heat, to expel their sẽd any further. For horses, as Martin saith, are seldom troubled wỉ this disease because of their heat, vnles it be whẽ they haue bin ouer trauelled, or otherwise weakned. The cure, according to him, is thus. Wash ỹ sheath clean within wỉ lukewarm vineger, then draw out

out his yard and wash that also: that done, ride him into som running streame vp to the belly, telling him therin to and fro, to allay the heat of the members, and vse him thus two or three daies and he shal be whole.

## Of the mattering of the yard. Chap. ci.

IT commeth at couering time, when the horse and mare both are ouer hot, and so perhaps burn themselues. The cure according to Martin, is thus. Take a pint of white wine, & boile therin a quartern of roche Alome, & squirt therof into his yard three or foure squirtfuls, one after another, and thrust ỹ squirt so far in as ỹ liquor may pierce to the bottom, to scowre away ỹ bloudy matter, continuing thus to do once a day vntil he be whole.

## Of the shedding of seede. Chap. cii.

THis disease is called of ỹ Physicians Gonorrhea, which may come somtime through aboundãce & rankes of sæd, & sometime by ỹ weaknes of ỹ stones, & sæd vessels not able to retain ỹ sæd vntil it be digested & thickned. Vegetius saith ỹ this disease wil make ỹ horse very faint & weak, & specially in sũmer season: for cure wherof, the said Vegetius, would haue ỹ horse to be ridden into some cold water, euen vp to the belly, so as his stones may be couered with water, and then his fundament being first bathed with warm water or oile, he would haue you to thrust in your hand and arme euen to the very bladder, and softly to rub and claw the same and the parts thereabouts, which be the sæde vessels: that done, to couer him warm that he take no colde, and euerie day he would haue you to giue the horse hogges dung to drinke with redde wine, vntill he be whole. I for my part, if I thought that it came of weaknes, as is afore said, which I wold iudge by the waterishnes of the sæd, and vnlustines of the horse, would giue him red wine to drinke, and put therein a litle Acarium, the iuice of Plantaine, and a little Mastick, and bathe his backe with red wine and oile of Roses mingled together.

Of

## Of the falling of the yard. Chap. ciii.

IT commeth, as I take it, through ỹ weakenesse of ỹ member, by means of some resolution in the muscles & sinews serving ỹ same, caused at the first (perhaps) by som great strain or stripe on the back. It may come also by wearines & tiring. For remedie wherof Absirtus was wont to wash ỹ yard with salt water frō ỹ sea, if it might be gotten: if not, with water & salt, & if ỹ prevailed not, he would all to pricke the out most skinne of the yard with a sharpe needle, but not deepe, and then wash all the prickes with strong vineger, and that did make the horse, as he saith, to draw vp his yard againe immediatly: yea, and this also will remedie the falling out of the fundament. Pelagonius would haue you to put into the pipe of his yard, honny and salt boyled together and made liquid, or else a quicke flie, or a graine of Frankincense, or else a Clove of Garlike cleane pilled, and somewhat bruised, and also to poure on his backe oyle, wine, Nitre, made warme and mingled together. But Martins experience is in this sort. First wash the yard with warm white wine, and then annoint it with oile of Roses, and honny mingled together, and put it vp into the sheath. And make him a Codpiece of Canuas to kéep it still vp, and dresse him thus euery day once, vntill he be whole. And in any case let his backe bee kept warme, either with a double cloth, or else with a charge made of bole Armony, Egs, wheate flower, Sanguis Draconis, Turpentine and vineger, or else lay on a wet sack, which being couered with an other drie cloth will kéepe his backe very warme.

## Of the swelling of the Codde and stones. Chap. Ciii.

ABsirtus sayeth that the inflammation and swelling of the Cod and stones, commeth by meanes of some wound, or by the stinging of some serpent, or by fighting one horse with another. For remedie whereof, hee was woont to bathe the Cod with water, wherin had béen sodden the rootes of wild Cucumber and salt, and then to annoint it with an ointment made of Ceruse oile, Goates grease, and the white of an Egge. Some againe would haue the Cod to be bathed in warme water, Nitrum,

trum and vineger mingled together, and also to be annointed with an ointment made of chalk, or of potters earth, Ore dung, cumin, water & vineger, mingled together, or else to be annointed with the iuice of the hearbe Solanum, called of some Night shade, or with the iuice of hemlocke growing on dung hils: pea, and also to be let blood in the flankes. But Martin saith, that the swelling of the Cods commeth for the most part, after some sickenesse, or surfetting with cold, & then it is a signe of amendment. The cure according to his experiẽce, is in this sort. First let him blood on both sides the flank veins. Then take of oile of Roses, of vineger, of ech halfe a pint, and halfe a quarterne of Bole Armonie, beaten into powder. Mingle them together in a Cruse, and being lukewarm, annoint the Cods therewith with two or thrée feathers bound together; and the next day ride him into the water so as his Cods may be within the water, giuing him two or thrée turnes therein, and so to returne faire and softly to the stable, and when he is drie annoint him againe as before, continuing thus to doe euery day once vntill he be whole. The saide Martin saith also, that the Cods may be swollen by meanes of some hurt or euill humours resorting into the Codde, and then he would haue you to couer the Coddes, with a charge made of bole Armonie & vineger wrought together, renewing it euery day once vntill the swelling go away, or that it breake of it selfe: and if it breake, then taint it with Mel Rosatum, and make him a brech of canuas to kéepe it in, renewing the taint euery day once vntill it be whole.

## Of incording to burstling. Chap. cv.

This tearme incording is borrowed of the Italian worde Incordato, which in plaine English is as much to say as bursten, and might bee more rightly tearmed of vs incodded. For when a Horse is bursten, his gutte falleth down into the cod, making it to swell. The Italians, as I take it, did call it Incordato because the gut followes the string of the stone called of them Il cordone, or La chorda, wherof Incordato séems to be derined with some reason. According to which reason wee should call it rather instructed than incorded. Notwithstanding,

saith

sich that incoꝛding is already receiued in ẏ stable, I foꝛ my part am verie wel content therwith, minding not to contend against it. But now you haue to note, that either man oꝛ beast many be burstē diuerslỹ, and accoꝛding to the names of the parts grieued, the Physicians do giue it diuers names: foꝛ you shall vnderstand, that next vnto ẏ thick outward skin of the belly, there is also another inwarde thin skin couering all the muscles, the Caule, and the guts of the belly, called of the Anatomists, Peritoneum, which skin commeth from both sides of the backe, and is fastned to the midꝛiffe aboue, and also to the bottome of the belly beneath, to kẽpe in all the contentes of the neather belly. And therefoꝛe if the skin be bꝛoken, oꝛ ouer soꝛe strained oꝛ stretched, then either some part of the Caule oꝛ guts slippeth downe, somtime into the Cod, somtime not so far. If the gut slip down into ẏ Cod, then it is called of ẏ Physicians by the greek name, Enterocele, that it is to say, gut burstē. But if the Caule fal down into ẏ Cod, then it is called of ẏ Physicians Epiplocele, that is to say, Caule burstē. But either of the diseases is most pꝛoperly incident to the male kinde, foꝛ the female kinde hath no Cod. Notwithstãding, they may be so burstē, as either gut oꝛ caule may fall downe into their nature, hanging there like a bag But if it fall not downe so low, but remaineth aboue nigh vnto ẏ pꝛiuie members oꝛ flankes, which place is called of the Latins Inguen, then of that place the bursting is called of the Physicians Bubonocele, whereunto I know not what English name to giue, vnlesse I should call it flank burstē. Moꝛeouer, the cod oꝛ flank may be sometime swollen, by means of som waterish humour, gathered together in the same, which is called of the Physicians Hydrocele, that is to say, water burstē, & somtime the cod may be swollen by means of some hard peece of flesh cleauing to the thin skins oꝛ panicles of the stones, and then it is called of ẏ physicians Sarcocele, that is to say, flesh burstē. But foꝛ asmuch as none of mine Authoꝛs Martin noꝛ any other ferrer in these daies that I know, haue intermedled with any kind of bursting, but only with that wherein the gut falleth down into ẏ cod: leauing all the rest apart, I wil onely talke of this, and that accoꝛding to Martins experience, which I assure you differeth not much frõ

the precepts of the old writers. But first you shall vnderstand, that the gutte burssen, and flanke burssen, doth proceed both of one cause, that is to say, by means that the skinne, called before Peritoneum, is either sore strained, or else broken, either of which things do most commonly chance to horses, either by som stripe of an other horse, or else by some strain in leaping ouer a hedge, ditch, or pale, or otherwise: yea, and many times in passing a cariere, through the vndiscretnesse of the rider stopping the horse suddenly without giuing him any warning, wherby the horse is forced to cast his hinder legs abroad, and so straineth or burssteth the skin aforesaid, by means whereof the gut falleth downe into his Cod. The signes be these. The horse wil forsake his meate, and stand shoring and leaning alwayes on that side ỹ he is hurt: and on that side if you search with your hand, betwixt the stone and the thigh vpward to the body, and somewhat aboue ỹ stone, you shal find the gut it selfe big and hard in the feeling, whereas on the other side you shal finde no such thing. The cure, according to Martin, is thus. Bring ỹ horse into some house or place that hath ouer head a strõg bawke, or beam going ouerthwart, and strow that place thicke with straw. Then put on foure pasternes with foure rings on his feete, and fasten the one ende of a long rope to one of those rings, thread all the other rings with the lose end of the rope, and so drawe all his foure feet together, and cast him on the strawe. That done, cast the rope ouer the bawke, and hoise the horse so as he may lie flat on his back, with his legs vpward without strugling. Then bathe his stones wel with warm water and butter molten together: and the stones being somewhat warme, & wel mollified, raise them vp from the body with both your hands being closed by the fingers fast together, and holding the stones in your hands in such maner, worke downe the gut into the body of the horse, by striking it downeward continually with your two thumbs, one labouring immediatly after another, vntill you perceiue that side of the stone to be so small as the other: hauing so discorded, that is to say, returned the gutte into his right place: take a list of two fingers broad throughly annointed with fresh butter, and tie his stones both together with ỹ same so nigh the body as may be, not ouer

hard,

hard, but so as you may put your finger betwixt. That don, take the horse quietly downe, and leade him faire and softly into the stable, whereas he must stand warm, & not be stirred for ỳ space of three weekes. But forget not the next day after his discording to unlosen the list and to take it away, and as well at ỳ time as euerie day once or twise after, to cast a dish or two of cold water up into his cods, and that wil make him to shrinke up his stones and thereby restraine the gut from falling downe: and at ỳ three weekes ende to be sure, it were not amisse to geld the stone on ỳ side away, so shal he neuer be incorded againe on that side. But let him not eat much nor drinke much, and let his drinke bee alwayes warme.

## Of the botch in the graines of a horse. Chap. Cvi.

IF a horse be full of humors & then suddēly labored, the humors wil resort into ỳ weakest parts, & there gather together & breed a botch, & specially in ỳ hinder parts betwixt the thighes, not far from ỳ cods. The signes be these. The hinder legs wil be al swollen, & specially from ỳ houghes upward, & if you fele with your hand you shal find a great kind of swelling, and if it be roūd and hard it wil gather to a hed. The cure according to Martin is thus. First ripe it with this plaister: take of wheate flower, of turpentine, and of hony, of each like quantitie, stirring it together to make a stiffe plaister, and with a cloth lay it vnto the sore, renewing it euerie day once vntil it breake or ware soft, and then lance it so as the matter may run downward. Then taint it with turpentine and hogs grease molten together, renewing it euery day once, vntil it be whole.

## Of the diseases incident to the wombe of a mare, and specially of barrennesse. Chap. cvii.

IT seemeth by some writers, that the wombe of a Mare is subiect to certaine diseases, though not so many as the wombe of a woman: as to ascent, descent, falling out, convulsion, barrennesse, abortement: yea Aristotle and others doe not let to write, that menstruall blood dooth naturallie

void from the mare, as from the woman, though it be so little in quantitie, as it cannot be well perceiued. But sith none of mine Authors haue written therof to any purpose, nor any Ferrer of this time that I know, haue had any experiẽce in such matters, I wil passe them al ouer with silence, sauing barrennesse, where of I promised in the bzéeders office to declare vnto you the causes and such kind of cure for the same, as the old writers haue taught. A mare then may be barren through the vntemperatenesse of the womb or matrix, as for that it is too hot and fiery, or else too cold and moist, or too drie, or else too short or too narrow, or hauing ẏ neck thereof turned awry, or by means of som obstruction or stopping in the matrix, or for that ẏ mare is too fat, or too leane, & many times mares go barren, for that they be not wel horsed. Wel, the cure of barrennesse that commeth through the fault of the matrix or wombe according to ẏ old writers is thus. take a good handfull of leeks, stamp them in a mortar, with halfe a glasse full of wine, then put thereunto twelue flies, called of ẏ Apothecaries Cantharides, of diuers colours if they may be got ten, then straine all together with a sufficient quantitie of water to serue the mare therwith two daies together, by powring the same into her nature with a horn or glister pipe made of purpose and at the end of thrée daies next following, offer the horse vnto her that should couer her, and immediatly after that shée is couered, wash hir nature twise together with cold water.

Another receipt for the same purpose.

TAke of Nitrum, of sparrowes dung, and of turpentine, of each a like quantitie, well wrought together, and made like a suppositorie, and put that into hir nature, and it will cause her to desire the horse and also to conceiue. Hypocrates saith, that it is good also to put a Nettle into the horses mouth that should couer hir.

Of the Itch, Scab, and mangineſſe in the taile, and falling of the taile. Chap. cviii.

IN spring time horses be many times troubled with the tron-chions in their fundament, and then they will rub their taile, and

and breake the haire thereof, and yet in his taile perhaps, shalbe neither itch, scurffe, nor scabbe: wherefore if you rake ỳ horse well with your hand annoynted with Sope, and search for those troncheons, and pul them clean out, you shal cause him to leaue rubbing: and if you see that ỳ haire doth fall away of it selfe, then it is a signe, that it is either eaten with wormes, or that there is some scurffe or scab fretting ỳ haire, and causing such an itch in his taile, as the horse is alwaies rubbing the same. As touching the wormes, scurffe, or scab, it shalbe good to annoint all the taile with Sope, and then to wash it cleane euen to ỳ ground with strong lie, and that will kill the wormes, and make the haire to grow againe. And if much of the taile be worne away, it shall bee needful to kéepe the tail continually wet, with a sponge dipt in faire water, and that wil make the haire to grow very fast. But if the horses taile be mangy, then heale that like as you doe the manginesse of the mane before rehearsed. Againe, if there breede any canker in the taile (which wil consume both the flesh and bone, and as Laurẽtius Rusius saith, make the ioints to fal away one by one,) it shall bee good, as Martin saith, to wash all his taile with aqua fortis, or strong water, made in this sort: take of grééne Copouas, of Alum, of ech one pound, of white Copouas a quarterne. Boile al these thinges together in thrée quartes of running water, in a very strong earthen pot, vntill the one halfe be consumed, & then with a little of this water being made lukewarme, wash his taile with a little clout, or Flax bound to the end of a stick, continuing so to doe euery day once, vntill it bee whole.

## How to know when a horse halteth before, in what part his griefe is. Chap. cix.

Being now come to talk of the grieses in the shoulders, legs, hips, houghes, ioints, and houes, causing ỳ horse most commonly to halt: I thinke it good first to shew you the way how to find in what part of his legges the horse is grieued whẽ he halteth either before or behind. And first you haue to cõsider, ỳ if a horse halteth before, it must bee either in his shoulders, in his legs, or in his féet. If it be in his shoulders

and new hurt, the horse will not lift that leg, but traile it nigh the ground. If it bee old hurt, hee will cast that leg further from him in his going, than the other, and if he bee turned on the sore side, then hee will halt so much the more. If a horse halteth in the leg, it is either in the knée, in the shanke, or else in the pasterne ioint: if it be either in the knée, or pasterne ioint, hee wil not bow that in his going like the other, but goe very stifly vpon it. If hee halteth in the shank, then it is by meanes of some splent, windgal, or such apparant griefe, apt to bee seene or felt. If he halt in the foot, it is either in the cronet, in the héele, in the toe, quarters, or sole of the foot. If it be in the cronet, the griefe will be apparan, the skinne being broken or swollen some manner of way: if in the heele, as by ouerreach, or otherwise, then hee will tread most on the toe: if vpon any of the quarters, then going on the edge of a banke or hilly ground, hee will halt more than on the plaine ground: and by the Horses comming towardes you, & going from you vpon such edge or banke, you shal easily perceiue whether his griefe be in ỹ inward quarter or outward quarter: The quarter is to be vnderstood, from the midwone to the héele. If hee halt in the toe, which is not commonly séene, then hee will tread more vpon the héele. If the griefe bee in the sole of his foot, then he will halt al after one sort vpon any ground, vnlesse it bee vpon the stones. And to be sure in what part of the foot the grief is, it shall be good first to make him goe vpon the plain ground, and then vpon a hard and stonie ground: yea, and also a bankie ground. Thus hauing declared vnto you in general, how to know in what part a Horse is grieued when he halteth before: I think it méete first to shew you orderly all the particular griefes and sorances, whereunto the foreparts of a horse is subiect, together with the causes, signes and cure thereof. That done, I wil speake of halting behind, and shew you first generally where the griefe is, & then particularly declare vnto you euery griefe incident to the hinder partes of a horse. And lastly, I wil speak of such griefes and sorances as are common to both partes, that is to say, as wel to the forelegges, and foreféet, as to ỹ hinder legs, and hinder feete.

Of

Of the griefe and pinching in the shoulder Chap. Cx.

This commeth either by labouring and straining the horse too young, or else by some great burthen: you shal perceiue it by the narrownesse of the breast, and by consuming of the flesh of the shoulders, insomuch as the forepart of the shoulder bone will sticke out, and bee a great deale higher than the flesh. And if it bee of long continuance, he wil be very hollow in the brisket towardes the armeholes, and hee wil goe wider beneath at the feete, than aboue at the knées. The cure, according to Martin, is thus. Giue him a slit of an inch long with a sharpe knife or rasor vpon both sides, an inch vnder the shoulder bones: then with a Swannes quil put into the slit, blow vp first the one shoulder, and then the other, as big as you can possible, euen vp to the withers, & with your hand strike the wind equallie into euery place of the shoulders. And when they be both ful, then beat all the windie places with a good hasel wand ouer al the shoulder: then with a flat slice of iron, loosen the skin within from the flesh: that done, rowel ỹ two slittes or cuttes with two round rowels made of the vpper leather of an old shoe, with a hole in the middest that the matter may issue forth, and let such rowels be three inches broad, & so put in that they may lie plaine and flat within the cut: then make a charge to lay vpon the same in this sort. Take of pitch, and rosen, of ech one pound; of tarre halfe a pinte, boile these thinges altogither in a pot, & when it is somewhat coled, take a stick with a woollen clout bound fast to the one end therof, and dip it into this charge, and couer or dawb al the shoulders therewith. That done, clap thereunto a pound of Flocks of such color as the horse is, or as nigh vnto the same as may bee, and euery other day cleanse both the woundes and rowels, and put them in againe, continuing thus to do the space of fiftéene daies. Then take them out, and heale vp the wounds, with two taintes of Flax dipt in Turpentine, and Hogges grease molten togither, renewing the same euery day once, vntil the woundes be whole. But let the charge lie stil, vntil it fal away of it selfe, and let the horse runne to grasse, vntil he hath had a frost or two.

Of

Of the wrinching of the shoulder. Chap. cxi.

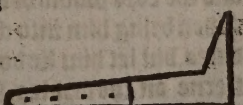
THis commeth sometime by a fall, and sometime by turning too suddenly in some vneuen ground, or by rash running out of some doore, or by some stripe of another horse, or by some sudden stoppe in passing a Carriere: you shall perceiue it in his going, by traysing his leg vpon the ground, so close vnto himselfe as he can possible. The cure, according to Martin, is thus. Let him bloud the quantitie of three pints on the breast in the plat veine, receiuing the bloud in a pot, and thereunto put first a quart of strong vineger, and halfe a dozen broken egges, shelles and all, and so much wheat flower as will thicke all that liquor. That done, put thereunto of bole Armony beaten into fine powder one pound, of Sanguis Draconis two ounces, & mingle them al together, so as the flower may not be perceiued: & if it be too stiffe, you may make it more liquid or soft, with a little Vineger. Then with your hand dawbe al the shoulder from the mane downward, and betwixt the forebowels all against the haire, & let not the horse depart out of that place, vntil the charge be surely fastned vnto ỹ skin. That done, carry him into the stable, and tie him vp to the racke, and suffer him not to lie down al that day, and giue him a little meat, dieting him moderatly the space of fiftéene daies: during which time, he may not stir out of his place, but onely to lie down: and euerie day once refresh the shoulder point with this charge, laying stil new vpon the olde, & at the fiftéene daies end, lead him abroad to sée how he goeth: and if he be somwhat amended, then let him rest without trauelling, the space of one month, and that shal bring his shoulder to perfection. But if he be neuer the better for all this that is done, then it shall bee néedfull to rowell him with a leather rowell vpon the shoulder point, & to kéep him rowelled ỹ space of fifteene daies, renewing the rowell, and cleansing the wound euery other day, and then walke him vp and down faire and softly, and turn him alwaies on the contrary side to the sore, and when he goeth vpright, pull out the rowell, and heale ỹ wound with a taint of flax dipt in Turpentine, and hogs grease molten together. And if all this wil not serue, then shal it be néedfull to drawe him checkerwise with a hot iron ouer all ỹ shoulder point, and also to make

him

him to draw in a plough euery day two houres at ỳ least, to settle his ioints for the space of three weeks or a moneth, and if any thing wil helpe him, these two last remedies wil helpe him, and make him to go right vp againe.

## Of splaiting of the shoulder. Chap. cxii.

This commeth by some daungerous sliding or slipping, whereby the shoulder parteth from the breast, and so leaues an open rift, not in the skinne, but in the flesh and filme next vnder the skinne, and so hee halteth and is not able to go, you shal perceiue it by trailing his leg after him in his going. The cure, according to Martin is thus. First put a paire of strait pasterns on his forefeet, keeping him still in ỳ stable without disquieting him. Then take of Dialthea one pound, of sallet oile one pint, of oile de Bates half a pound, of fresh butter half a pound, melt all these things together in a pipkin, and annoint ỳ grieued place therewith, and also round about the inside of the shoulder, and within two or three dates after, both that place and all the shoulder besides wil swell. Then either pricke him with a lancet or fleam, in all the swelling places, or else with a sharpe hot iron made in this sort, the head whereof would be an inche long, to the intent that the corruption may run out, and vse to annoint it still with the ointment aforesaide.



But if you see that it wil not go away but swell still, and gather to a head, then lance it where ỳ swelling doth gather most, and is soft vnder ỳ finger, and then taint it in flax dipt in this ointment: take of turpentine & of hogs grease of each two ounces, & melt them together, renewing the taint twise a day, vntil it be whole.

## Of the shoulder pight. Chap. Cxiii.

This is when the shoulder point or pitch of the shoulder is displaced, which griefe is called of the Italians Spallato; and it commeth by reason of some great fall forward rush, or straine. The signes be these. That shoulder point will sticke out further than his fellowe, and the horse will haulte

right

right down. The cure, according to Martin, is thus. First make him to swim in a deep water up and down, a dosen turnes, and that shal make the ioint to returne to his place. Then make two tough pinnes of Ashen wood as much as your litle finger, sharp at the points, each one fiue inches long: that done, slit ỹ skin an inch aboue the point, and an inch beneath the point of the shoulder, and thrust in one of the pinnes from aboue downward, so as both ends may equally sticke without the skin. And if the pin of wood wil not easily passe through, you may make it way first with an iron pin. That done, make other two holes crosse to the first holes, so as the other pin may crosse the first pin right in the midst with a right crosse: and the first pin would be somwhat flat in the middest, to the intent that ỹ other being round, may passe the better without stop and close the luster together. Then take a peece of a litle line somwhat bigger than a whipcord, and at one end make a lope, which being put ouer one of the pinnes endes, wind the rest of the line good and straite about the pinnes endes, so as it may lie betwixt the pinnes ends and the skin, and fasten the last end with a packe needle and a packe thread, vnto the rest of the cord, so as it may not slip: and to doe wel, both the prickes and the cord would bee first annointed with a litle hogs grease. Then bring him into the stable, and let him rest the space of nine daies, but let him lie down as litle as may bee, and put on a pasterne on the sore leg, so as it may be bound with a cord vnto ỹ foot of the manger, to keep that legge alwaies whilest he standeth in the stable more forward than the other. And at the nine daies end take out the prickes, and annoint the sore places with a litle Dialthea, or with hogs grease, and then turne him out to grasse.

## Of the swelling of the forelegs after great labor. Chap. cxiiii.

Great labour and heate causeth humours to resort downe into the legges, making them swell. The cure whereof, according to Martin is thus. Bathe them with buttered beere, or else with this bath beere following: take of mallowes three handfull, a rose cake, and of sage one handfull: boile them together in a sufficient quantitie of water, and when the mal-

Mallowes be soft, put in halfe a pound of butter, and half a pint of Sallet oile, and then being somwhat warme, wash the swelling therewith, euerie day once, the space of three or foure daies. And if the swelling wil not go away with this, then take Wine lées, and Cumin, and boile them together, and put thereunto a little wheate flower, and charge all the swelling therewith, and walke him often: and if it wil not serue, then take vp the great veine aboue the knée on the inside, suffering him not to bléed frō aboue, but all from beneath.

Of the foundering in the forelegs. Chap. cxv.

The cause of this griefe is declared before in the Chapter of foundering in the body, whereas I shewed you, that if a horse bee foundered in the body, the humours will immediatly resort downe into his legges, Martin saith within the space of 24. houres: and then the horse will go crowching all vpon the hinder legs, his forelegs being so stiffe, as he is not able to bow them. The cure whereof, according to Martin, is in this sort. Garter each legge immediatly one handfull aboue the knée, with a liſt good and hard, and then walke him or chafe him, to put him in a heat: and being somewhat warmed, let him blood in both the breast veins: reserving the blood to make a charge withall in this manner. Take of ỹ blood two quartes, and of wheat flower half a peck, and fiue egges, shelles and all, of bole Armonie half a pound, of Sanguis Draconis half a quarterne, and a quart of strong vineger: mingle them all together, and charge all his shoulders, breast, back, loines, and fore legges therwith, and walke him vpon som hard ground, suffering him not to stand still, and when the charge is drie, refresh it againe. And hauing walked him three or four hours together, lead him into the stable, and giue him a little warm water with ground maulte in it, and then a little hase and prouender, and then walke him againe, either in the house, or els abroad, and continue thus to doe the space of foure daies: and when al the charge is spent, couer him wel with a housing cloth, and let him both stand and lie warme, and eate but litle meat during the foure dayes. But if you sée that at the foure dates end he mendeth not a whit, then

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it is a signe that the humors lie in ỹ foot, for the which you must search with your butter, paring al the soles of the forefeet so thin as you shall se the water issue through the sole. That done, with your butter let him blood at both the toes, and let him bleed wel. Then stop ỹ veine with a litle hogs grease, and turpentine molten together, and laide vpon a little Flore, and then tacke on the shoes, and cram the place where you did let him blood hard with towe, to the intent it may be surely stopt. Then fil both his feet with hogges grease, and branne fried together in a stopping Pan, so hot as is possible. And vpon that stopping clap a piece of leather, or elle two splentes to kéep in the stopping. And immediately after this, take two egges, beate them in a dish, and put thereunto as much bole Armonie, and Bean flower, as wil thicken the same, and mingle them wel together, and make thereof two plaisters, such as may close euch foot round about, somewhat aboue the cronet, and bind it fast with a liſt, or rowler, ỹ it may not fal away, nor be remoued for the space of two dates, but let the sole be cleansed, & new stopped euerie day once, and the cronets to be remoued euery two dayes, continuing so to doe vntil it be whole. During which time, let him rest vnwalked for feare of losening his houes. But if you se that hee begin to amend, you may walke him faire and softly once a day vpon some soft ground, to exercise his legges and féete, and let him not eate much, nor drinke colde water. But if this foundering break out aboue the hoose, which you shal perceiue by the loosenesse of the coffin aboue by the cronet, then when you pare the sole, you must take all the forepart of the sole clean away, leauing the heeles whole, to the intent ỹ humors may haue the freer passage downward, and then stop him, and dresse him about the cronet as is before said.

## Of the splent as well in the inside or outside of the knee, as other where in the legge. Chap. cxvi.

This sorance to any mans feeling is a verie gristle, sometime as bigge as a Walnut, and sometime no more than a Hasell nut, which is called of the Italians, Spinella, and it commeth, as Laurentius Rusius sayeth, by trauelling the

the horse too young, or by oppressing him with heavy burthens, offending his tender sinewes, and so causeth him to halt. It is easie to know because it is apparant to the eye, and if you pinch it with your thumb and finger, ỹ horse wil shrink vp his leg. The cure wherof, according to Martin, is in this sorte. Wash it well with warme water, and shaue off the hair, and lightly scarifie al the sore places with the point of a rasor, so as ỹ bloud may issue forth. Then take of Cantharides half a spoonful, & of Euforbium as much, beaten into fine ponder, & mingle them together with a spoonful of oile de Bay, and then melt them in a litle pan stirring them wel together, so as they may not boil ouer, and being so boiling hot, take two or three feathers, and annoint all ỹ sore place therwith. That done, let not the horse stirre from the place where you so dresse him for one hour after, to the intent he shake not off th' ointment. Then carry him faire & softly into the stable, and tie him so as he may not reach with his head beneath ỹ manger, for otherwise he wil couet to bite away the smarting & pricking medicine, which if it should touch his lips, wold quickly fetch off the skin. And also let him stand without litter all ỹ day and night. The next day annoint ỹ sore place with fresh butter, continuing so to doe euery day once for the space of nine daies, for this shal allaie the heat of the medicine, and cause both that and the crust to fall away of it selfe, and therwith neither cleane take away the splent, or at the least remoue it out of ỹ knée into the leg, and so much diminish it, as the horse shal go right vp, & halt no more through occasion therof. Laurentius Rusius wold haue ỹ splent to be cured by siering it longst wise & ouerthwart. Some againe do make it so soft by beating it with a hasel stick, and then doe sucke it out with a peece of new leather, and a hote iron, which many times diminisheth the splent, and increaseth ỹ halting. For if a splent be not very wel dressed, the horse wil halt halfe a yeare after: yea, and perhaps all his life long.

## Of a Malander. Chap. cxvii.

A Malander is a kinde of scabbe growing in the forme of lines, or strokes, ouerthwart the bent of the knée, and hath long haires with stubborne rootz, like the bristles of a boze,

which

which corrupteth & cankereth the flesh, like the rotes of a childs scabbed head: and if it be great, it wil make the horse to go stiffe at the setting forth, and also to halt. This disease proceedeth sometime of corrupt blood, but most commonly for lacke of clean keeping & good rubbing. The cure, according to Martin, is thus. First wash it wel with warme water, then shaue both haire and scab cleane away, leauing nothing but the bare flesh, whereunto lay this plaister. Take a spoonful of Sope, and as much of lime. mingle them together, that it may bee like paste, and spreade as much on a clout as wil couer the sore, and binde it fast on with a list, renewing it euery day once the space of two or three daies. and at the three daies end, take away the plaister, and annoint ỹ sore with oile of Roses made luke warme, and that shall fetch away the crust or scurfe, bred by means of ỹ plaister: which scurfe being taken away, wash the sore place wel euery day once with his owne stale, or else with mans vrine, and then immediatly strew vpon it the powder of burnt oister shels, continuing thus to do euery day once, vntill it be whole.

## Of an vpper attaint or ouerreach vpon the back sinewe of the shanke, somwhat aboue the ioint. Chap. cxviii.

The Italians call this sorance Attincto, which is a painefull swelling of the maister sinewe, by meanes that the horse booth sometime ouerreach, and strike that sinewe with the toe of his hinder foote, which causeth him to halt. The signes be apparant by the swelling of the place, and by the horses halting. The cure, according to Martin, is thus. wash ỹ place with warme water, and shaue all the haire so farre as the swelling goeth, and scarifie euerie part of the sore place lightly with the point of a rasor, that the bloud may issue forth. Then take of Chantharides, and of Euforbium, of each half an ounce, mingle them together with halfe a quarterne of Sope, and with a slice spread some of this ointment ouer all the sore, suffering him rest there as you dresse him for one halfe houre after, and then you may carry him into the stable, and there let him stand without litter, and tied as hath bene saide before in the Chapter of the splent, and the next day dresse him with the same ointment once

again,

againe, euen as you did before. And the third day annoint the place with fresh butter, continuing so to doe ỹ space of 9. daies, and at ỹ nine dayes end, make him this bath. Take of Mallows thrée handfull, a Rose cake, of Sage an handful. Boile them together in a sufficient quantitie of water. And when ỹ Mallows be soft, put in halfe a pound of butter, and halfe a pinte of Sallet oile, and then being somewhat warme, wash the sore place therwith euery day once, the space of thrée or foure dayes.

## Of a nether taint. Chap. cxix.

THis is a litle bladder full of jelly, much like vnto a windgal, not apparant to the eye, but to ỹ féeling, growing in the midst of the pastern, somwhat aboue ỹ frush. It commeth by a strain, or elle by som wrench, or by an ouerreach, and maketh the horse to halte. The signes be these. The neather ioint toward the fewterlocke wil be hote in féeling, & somwhat swollen. The cure, according to Martin, is in this sort. Tie him about ỹ ioint with a list somwhat hard, & that wil cause ỹ bladder to appeare to ỹ eie. Then lance it with a sharp pointed knife, & thrust out all ỹ jelly. That done, lay vnto it the white of an egge, and a little salt beate together, and layd vpon flare or towe, & bind it fast vnto the sore, renewing it once a day the space of foure or fiue dayes, during which time let him rest, and then you may boldly labour him.

## Of an ouerreach vpon the heele. Chap. Cxx.

THis is a cut, so as the skin hangs downe at the heele, made with the toe of ỹ hinder foot, & is apparant to the eie, & it wil cause the horse somwhat to halt. The cure therof, according to Martin, is thus. Cut away the skin that hangeth down, & bind vnto it a little flare dipt in the white of an egge, mingled with a litle bole Armonie, renewing it euery day once the space of thrée or foure dayes, and that wil heale it.

## Of false quarters. Chap. Cxxi.

THis is a rift sometime in the outside, but most commonly in the inside of the howe, because the inside is euer the weaker

part, which sides are commonly called quarters, & thereof this sorance taketh his name, and is called a false quarter, that is to say, a crased or vnsound quarter, which name indéd is borowed of ỹ Italians, calling it in their tongue falso quarto. It commeth by euil shoing, and partly by euil paring. The signes be these. The horse wil for the most part halt, and the rift wil bléd, and is apparant to the eie. The cure, according to Martin, is thus. If the horse halt, then pull off the shoe, and cut so much away on that side of the shoe where the griefe is, as the shoe being immediatly put on again, the rift may bee vncouered. Then open the rift with a Rosenet or drawer, and fill all the rift with a rol of tow dipt in turpentine, war, and shéepes sewet molten togither, renewing it euery day once, vntill it be whole. And the rift being closed in the top, draw him betwixt the haire and the howe with a hot iron ouerthwart that place, to ỹ intent that the howe may shote all whole downward, and when the horse goeth vpright, ride him with no other shoe, vntil his howe bee throughly hardened again. But as touching shoes for false quarters, you shal haue the order of making of them declared vnto you hereafter in the end of this booke.

## Of halting behinde, and where the griefe is. Chap. Cxxii.

IF a Horse halte behinde, the griefe must either bee in the hippe, in the stifle, in the hough, in the hamme, in the legge, in the nether ioinct, pasterne or fote. If hee halte in the hippe of a newe hurt, the horse will goe sideling, and not followe so well with that legge as with the other. But if it bee old hurt, the sore hippe wil shrinke and bee lower than the other, and is best séene when he goeth vp a hil, or vpon the edge of some banke, so as the worst leg may go on the higher side, for then hée wil halt so much ỹ more, because it is painfull vnto him to go so vneuenly, wrinching his legge. If the griefe be in the stifle, then the horse in his going will cast the stifle ioint outward, and the bone on the inside wil be farre bigger than the other. If the griefe be in the hough, then it is by meanes of some Spauen, or some other hurt apparant to the eie. And the like may be sayde of the hamme, wherein may bee séene the Selander, or such like apparant

parant sorance, causing ỳ horse to halt. If the greif be either in the legge, pasterne, or sole, then you shall finde it by such signes as haue binne taught you before. And therfore let vs now speak of those sorances, that are properly incident to the hinder legs.

## Of a horse that is hipped, or hurt in the hippes. Chap. cxxiii.

The horse is saide to be hipt, when the hippe bone is remoued out of his right place, which griefe is called of the Italians, Mal del aucha. It commeth most commonlie by some great stripe or straine, slipping, sliding, or falling. The signes bee these. The horse will halte, and in his going bee wil go sideling, and the sore hippe wil fal lower than the other, and ỳ flesh in processe of time will consume cleane away. And if it bee suffered to run so long, it will neuer be restored vnto his pristine estate. The best way, as Martin saith, to make him go vpright is, to charge his hippe and back with Pitch and Rosen molten together, and laide on warme, & then some flockes of his owne colour to be clapped vppon the same, and so to let him runne at grasse, vntill he go vpright. But the sore hippe wil neuer rise againe so high as the other. If the horse be not hipped, but onely hurt in the hipp, and that newly, then first take of oile de Bay, of Dialthea, of Nenuall, of swines grease, of each halfe a pound, melt them altogether, stirring them continually, vntil they be throughly mingled together, and annoynt the sore place against the haire with this ointment, euery day once, the space of a fortnight, and make the ointment to sinke well into the flesh, by holding a hot broad barre of iron ouer the place annointed, weauing your hand to and fro, vntill the ointment bee entered into the skinne. And if at the fortnightes ende, you see that the horse amendeth no whitte for this, then slitte a hole downeward in his skinne, an inch beneath the hippe bone, making the hole so wide, as you may easily thrust in a rowell with your finger: and then with a little broad slice of iron, loosen the skinne from the flesh aboue the bone, and round about the same, so broad as the rowell may lie flatt and plaine betwixt

the skin and the flesh, which rowell would be made of soft calues leather, with a hole in the midst like a ring, hauing a thread tied vnto it, to pull it out when you would cleanse the hole, in this sort: and if the rowel be rowled about with flare fast tied on, and annointed with ỹ ointment vnder written, it wil drawe so much the more: and thrust in the rowell first double, & then spread it abroad with your finger. That done, taint it with a good long taint of flax or towe dipt in a litle turpentine, and hogges grease molten together, & made warm. and cleanse ỹ hole and the rowell euerie day once, & also renew the taint for the space of a fortnight. And before you dresse him, cause him euerie day to be led vp and down a fast pase a quarter of an houre, to make the humours come downe, and at the fortnights end pull out the rowell, and heale vp the wound with the same salue, making the taint euery day lesser and lesser, vntill it be whole. And so sone as it is whole, draw with a hot iron crosse lines of eight or nine inches long, right ouer the hip bone, so as the rowelled place may be in the very middest therof, and burne him no deeper, but so as the skinne may looke yellow, and then charge all that place, and ouer all his buttock with this charge. Take of pitch one pound, of Rosen halfe a pound, of tarre halfe a pint. Boile them together, and then being good and warme, spread it on with a clout tied in a riuen sticke: and then clap on a few flockes of the horses colour. And if it be in summer, let the Horse run to grasse a while, for ỹ more he trauelleth at his own wil, the better it is for him.

## Of stiffling, and hurtes in the stiffle. Chap. cxxiiii.

THe horse is said to be stiffled, when ỹ stiffling bone is remoued frō ỹ right place: but if it be not remoued nor lowsened, & yet ỹ horse halteth by means of som grief there, then we say that ỹ horse is hurt in ỹ stiffle, & not stiffled. The stiffle commeth by means of som side blow, or som great strain, slipping, or sliding. The signes be these. If he be stiffled, ỹ one bone will sticke out further than ỹ other, and is apparant to the eye. Martin would

haue

haue you to cure the stifle in all pointes like vnto the shoulder pight, sauing that the pins need not be so long, because the stifling place is not so broad as the shoulder: & standing in the stable, let him haue a pasterne with a ring vpon his fore leg, and thereunto fasten a cord, which cord must go about his necke, and let it be so much strained, as it may bring his fore legge more forward than the other to kepe the bone from starting out. But if the horse be but hurt in the stifle with some stripe or straine, then ỹ bone will not stand out, but perhaps the place may be swollen. The cure, according to Martin is thus. First annoint ỹ place with the ointment mentioned in the last chapter before, euery day once the space of a fortnight, and if ỹ horse amend not with this, then rowell him with a hairen rowell, or else with a quill, and let ỹ neather hole be somewhat beneath the sore place, and cleanse ỹ hole euery day, by turning the rowell, continuing still to annoint ỹ place with the ointment aforesaid, and that shal make him whole.

## Of foundering behind. Chap. cxxv.

THis haps most commonly when a horse is very fat, & hath his grease molten within him, which is soone done with euery little heat. You shal perceiue it by his going, for he will be afraid to set his hinder feet to ỹ ground, & he will be so weak behind, as he will stand quiuering & shaking & couet alwaies to lie down. The cure, according to Martin is thus. First garter him aboue ỹ houghes, & then force him to go a while to put him in a heat, & being somwhat warme, let him bloud in ỹ thigh veins, reseruing of that blood a pottle, to make him a charge in this sort. Put vnto that blood of wheat flower & of beane flower, of ech a quarter of a peck, of bole Armonie one pound, of Sanguis Draconis two ounces, six egs, shels & al, of turpentine halfe a pound, of Vineger a quart. Mingle all these things together, and therewith charge both his hinder legges, reines and flankes all against the haire. And if the horse cannot dung, let him bee raked, and giue him this glister: take of mallowes three hand fulles, and boyle them well in faire water from a pottle to a quart. Then straine it

and put thereunto halfe a pound of butter, & of sallet oile a quarter of a pinte, and hauing emptied his belly, giue him also this drinke to comfort him: take of malmesse a quarte, and put thervnto a litle Cynamon, mace and pepper, beaten into fine powder, and of oile a quartet of a pint, and giue the horse to drinke of that luke warme with a horne. That done, let him be walked vp and down a good while together if he be able to goe: if not, then tie him vp to the racke, and let him be hanged with canuas and ropes, so as he may stand vpon the ground with his feet. For the lesse he lie the better, and pare his hinder feet thin, vntil the deate come out, and tacking on the shoes again, stop the hoones with bran and hogs grease boyled together, & let both his feet hauing this geere in it, be wrapped vp in a cloth euen to his pasterns, and there tie the clout fast. Let his diet be thin and let him drinke no cold water, & giue him in winter wet haie, and in summer grasse.

## Of the drie Spauen. Chap. cxxvi.

The drie Spauen called of the Italians Spauano, or Sparuagno, is a great hard knobbe as bigge as a Walnut growing in the inside of the hough, hard vnder the ioint, nigh vnto the maister veine, and causeth the horse to halte: which sorance commeth sometime by kinde, because the horses parents perhaps had ỹ like disease at the time of his generation, and somtime by extreame labour and heate dissoluing humours wh'ch do descend through the maister veine, continually feeding that place with euil nutriment, and causeth that place to swel. Which swelling in cõtinuance of time becõmeth so hard as a bone, and therefore is called of some the bone spauen. It néedeth no signes to know it be cause it is apparant to the eye, and most Ferrers doe take it to be incureable. Notwithstanding, Martin saith, that it may be made lesse with these remedies héere following. Wash it with warme water, and shaue off the hair so far as the swelling extendeth, and scarifie ỹ place, so as it may bléede. Then take of Cantharides one dosen, and of Euforbium halfe a spoonefull, breake them in powder, and boyle them together with a litle oile de Baie, and with two or three feathers

bound

bound together, put it boyling hote vpon the sore, and let his tail be tied vp for wiping away the medicine: and then within halfe an houre after, set him vp in the stable, and tie him so as he may not lie down all that night, for feare of rubbing off the medicine, and the next day annoint it with fresh butter, cõtinuing thus to doe euerie day once the space of fiue or sixe dayes, and when the haire is growne again, draw ỹ sore place with a hot iron. Then take another hote sharpe iron like a boddin, somewhat bowing at the point, and thrust it in at the neather end of the middle line, and so vpward betwixt the skinne and the flesh an inch and a halfe. And then taint it with a little turpentine and hogges grease molten together & made warme, renewing it euery day once, the space of nine daies. But remember first immediatly after his burning to take vp the maister veine, suffering him to bléede a little from aboue, and tie vp the vpper ende of the veine, and leaue the neather end open, to the intent that hee may bléede from beneath, vntill it cease of it selfe, and that shal diminish the Spauen, or else nothing wil doe it.

## Of the wet Spauen, or through Spauen. Chap. cxxvii.

THis is a soft swelling growing on both sides of the hough, and séemes to goe cleane thorough the hough, and therfore may bee well called a thorough Spauen. But for the most part the swelling on the inside, because it is continually fed of the maister veine, is greater than the swelling on ỹ outside. The Italians call this sorance Laierda, or Gierdone: which seemeth to come of a more fluxible humor, & not so viscous or slimy as ỹ other Spauen doth, and therefore this wareth not so hard, nor growech to the nature of a bone, as ỹ other doth, and this is more curable then the other. It néeds no signes, because it is apparãt to the eie, and easy to knowe, by the description thereof before made: ỹ cure, according to Martin, is thus. First wash, shaue, & scarifie ỹ place, as before. Then take of Cãtharides half an oũce of Euforbũ one ounce broken to powder, & of oile de Baie one ounce. Mingle them wel together cold, without boiling them, & drelle ỹ sore therwith two days together, & euery day after, vntil

the haire be growne again, annoint it with fresh butter. Thē fire him both without & within as before, without tainting him, and immediatly take vp the maister veine, as before: and then for the space of nine dayes, anoint him euery day once with butter, vntill ỳ fiered place begin to scale, and then wash it with this bath. Take of Mallowes three handfuls, of Sage one handful, and as much of red nettles, boyle them in water vntill they be soft, and put thereto a little fresh butter, and bathe the place euery daie once for the space of three or foure dayes, and vntill the burning be whole, let the horse come in no wet.

## Of the Selander. Chap. cxxviii.

THis is a kind of scab breeding in the ham, which is the bent of the hough, & is like in all points to the Malander, procéeding of like causes, and requireth like cure, and therefore resort to the chapter of the Malander.

## Of the hough bonie. Chap. cxxix.

THis is a round swelling bonie, like a Paris ball, growing vpon the verie tip or elbowe of the hough, and therefore I thought good to call it the hough bonie. This sorance commeth of some stripe or bruse, and as Martin saieth, is cured thus. Take a round iron somewhat sharpe at the ende like a good big bodkin, & let it be somwhat bending at the point. Then holding the sore with your left hand, pulling it somwhat from ỳ sinews, pierce it with the iron, being first made red hote, thrusting it beneath in the bottome, and so vpward into the iellie, to ỳ intent that the same iellie may issue downward out at the hole, & hauing thrust out all the ielly, taint ỳ hole with a taint of Flaxe dipt in turpentine, and hogges grease molten together, & also annoint the outside with hogges grease made warm, renewing it euery day once, vntill the hole be ready to shut vp, making the taint euerie day lesser and lesser, to the intent it may heale vp.

## Of the Curbe. Chap. cxxx.

THis is a long swelling beneath the elbow of the hough, in the great sinew behind, and causeth the horse to halte, after that he

he hath bẽn a while laboured, and thereby somwhat heated. For the more the sinew is strained, the greater griefe: which again by rest is eased. This commeth by bearing som great weight whẽ the horse is yong, or elle by some straine or wrinch, whereby the tender sinewes are grieued, or rather bowed (as Rusius saith) whereof it is called in Italian Curbatura Curuando, that is to say, of bowing, for anguish wherof it doth swel, and with swelling is apparant to the eie, and maketh that legge to shew bigger than the other. The cure, according to Martin is thus: take of wine lées a pint, and a pozinger full of wheat flower, of Cumin halfe an ounce, and stirre them well together, and being made warm, charge the sore place therewith, renewing it euerie day once the space of three or foure dayes: and when the swelling is almost gone, then draw it with a hote iron, and couer the burning with pitch and rosen molten together, & late it on good and warm, and clap thereon some flockes of his owne colour, or so nigh as may be gotten, and remoue them not vntil they fall away of themselues. And for the space of nine dates let the horse rest, and come in no wet.

## Of the Paines. 131.

This is a kinde of scabbe called in Italian, Grappe, which is full of fretting matterish water, and it breedeth in the pasternes, for lacke of cleane kéeping and good rubbing after the horse hath been tourned, by meanes whereof the sand and dirt remaining in the haire, fretteth the skinne and flesh, and so breadeth to a scabbe. And therefore those horses that haue long haire, and are rough about the féete, are soonest troubled with this disease, if they be not the cleanlier kept. The signes be these. His legs wil be swollen & hot, and water wil issue out of ỹ scab, which water is so hot & fretting, as it wil scalde off ỹ haire and bréed scabs, so far as it goeth. The cure, according to Martin, is thus. First wash wel al the pasternes with béere and butter warmed together, and his legs being somwhat dried with a cloth, clip away all the haire, sauing the fewter lockes. Then take of turpentine, of hogges grease, of hony, of ech like quantitie, mingle them together in a pot, and put thereunto a litle bole

Armonie,

Armony, the yolkes of two egges, and as much wheat flower as wil thicken the things afore saide, and make it plaister like, & for that cause it had need to be very wel wrought and stirred together. Then with a slice strike some of ỹ plaister vpõ such a pece of linnen cloth as wil serue to go round about the pasterne, and bind it fast on with a rowler, renuing it once a day, vntil it bee whole, and let not the horse be trauelled nor stand wet.

## Of Mules, or kibed heeles, called of the *Italians*, *Mule*. Chap. cxxxii.

THis is a kind of scab, breeding behind, somwhat aboue ỹ nether ioint, growing ouerthwart the fewterlocke, which cõmeth most commonly for being bred in cold ground, or else for lacke of good dressing, after that he hath bin laboured in foule mire & dirty waies, wh ch dirt lying stil in his legs, fretteth ỹ skin, and maketh scabby riftes, which are sone bred, but not so sone gottẽ away. The anguish wherof maketh ỹ legs somtime to swel, and specially in winter, & spring time, & then ỹ horse goeth very stifly, & with great pain. This sorance is apparant to ỹ eye, & is cured according to Martin, in this sort. Take a pece of linnen cloth, & with ỹ salue recited in the last chapter, make such a plaister as may couer all the sore place, & bind it fast on, that it fall not off, renewing it euery day once, vntil ỹ sore leaue running, & beginneth to ware drie, then wash it euery day once with strong water, vntill it be cleane dried vp: but if this sorance be but in breeding, & that there is no raw flesh, then it shal suffice to annoint it with sope two or three dayes, and at ỹ three dayes end to wash them with a litle Beele broth or dish water.

## Of sorances or griefes that be common to all foure feete. Chap. cxxxiii.

HItherto we haue declared vnto you ỹ causes, signes & cure of all such griefs as are properly incident either to ỹ fore legs, or hinder legs: now therfore we wil speak of those grieles that be common to them both, and first of windgalles.

Of

## Of windgalles. Chap.cxxxiiii.

The windgall called of the Italians Galla, is a bladder full of corrupt iellie, wherof som be great & some be smal, & do grow on ech side of ỹ ioint, & is so painful & specially in summer season when ỹ weather is hot & the waies hard, as ỹ horse is not able to travel, but halteth down right. They com for the most part thorough extream labor & heat, wherby the humors being dissolued do flow & resort into the hollow places about the neather ioints, & there be congealed, & couered with a thin skin like a bladder. They be apparant to the eye & therefore need no other signes to know thē. The cure wherof according to Martin is thus. Wash them with warme water and shaue off the haire, & scarifie them with the point of a rasor, & dresse them with Cantharides in the selfe same maner as the splent in the knée was taught before, & annoint them afterward with butter vntil the skinne be whole. And if this wil not heale it, then draw them with a hot iron as is beforesaid. That done, slit the middle line which palleth right downe thorough the windgall with a sharp knife, beginning beneath and so vpward the length of half an inch, to the intent you may thrust the ielly out at that hole, and then lay vnto it a little pitch and rosen moulten together, and made lukewarme, & put a few flocks on it, and that wil heale him.

## Of wrinching the neather ioint. Chap.cxxxv.

This cōmeth many times by treading awry in som cart root or otherwise. The signes be these. The ioint wil be swollen & sore & the horse wil halte. The cure wherof according to Martin is thus: take of Dialthea half a pound, & as much of Mercual. Mingle thē together & anoint the sore place therwith, chafing it wel with both your hands ỹ the ointment may enter, continuing so to do euery day once, vntil the ointmēt be al spent, & let the horse rest. But if this wil not preuaile, then wash it wel with warme water, & shaue away al ỹ hair sauing the fenterlock. Scarifie it & lay to it Cantharides, & heal it as you do the splent in the knée.

Of

## Of enterfering. Chap.cxxxvi.

BEcause enterfering is to be holpen by ſhoing, wee purpoſe not to ſpeak of it, vntil we come to talk of ẏ order of paring & ſhoing all manner of houes, and therfore reſort thither.

## Of the ſhakell gall. Chap.cxxxvii.

IF a horſe be galled in the paſterns, with ſhakell, lock paſtern, or halter, annoint ẏ ſore place with a little hony & verdigreaſe boiled together, vntil it look red, which is a good ointment for all gallings on ẏ withers, and immediatly ſtrow vpon ẏ ointment, being firſt laid vpon the leg, a little chopt flax or towe, & that wil ſticke faſt, continuing ſo to do euery once vntil it be whole.

## Of hurts in the legs, that comme by caſting in the halter, or collar. Chap.cxxxviii.

IT chanceth many times, that a horſe hauing ſome itch vnder his eares, is deſirous to ſcratch the ſame with his hinder foote, which whileſt he reacheth too and fro, dooth faſten in the collar or halter, wherewith the more that he ſtriueth ẏ more he galleth his legs: and many times it chanceth for that he is tied ſo long, by means whereof he being laid, and ẏ haulter ſlack about his feet, in his riſing perhaps or turning he ſnarleth himſelfe ſo as he is not able to get vp, but hangeth either by the necke or legs, which ſomtimes are galled euen to the hard bone. Ruſsius calleth ſuch kind of galling Capiſtratura, which he was wont to heale with this ointment here following, praiſing it to be excellent good for ẏ cratches, or any ſcab, bruſe or wound: take of oile Oliue one ounce, of tarpentine two or three ounces, melt them together ouer the fire, and then put thereunto a litle wax, and worke them wel together, and annoint the ſore place therewith. Martin ſayth, it is good to annoint the ſore place with the white of an egge and ſallet oile beaten together, & when it commeth to a ſcab, annoint it with butter being molten, vntil it look browne.

Of

## Of the Cratches or Rats tailes called of the *Italians Crepaccie*. Chap. Cxxxix.

This is a kind of long scabby rifts growing right vp & downe in the hinder part from the fewterlock vp to ỹ Curb, and cõmeth for lacke of cleane kéeping, & is easily séene if you take vp the horses fot, and lift vp the haire. The cure according to Martin, is thus. Take of turpentine halfe a pound, of honny halfe a pint, of hogges grease a quarterne, and thrée yolkes of Egs, and of bole Armonie a quartern, beaten into powder, of Bean flower halfe a pinte, mingle all these wel together, and make a salue therof, & with your finger annoint all the sore places, shearing ỹ haire as you goe, to the intent you may the easilier finde them, & also to make the salue enter into the skin, and let the horse come in no wet, vntill he be whole.

## Of the Ringbone. Chap. cxl.

This is a hard grissle growing vpon the cronet, and some time goeth round about the cronet, and is called in Italian Soprosso. Laurentius Rusius sayeth, that it may growe in any other place of the legge, but then wee call it not a Ringbone, but a knot or knob. It commeth at the first either by some blow of another horse, or by striking his own fot against some stub, or stone, or such like casualtie. The pain wher of brédeth a vicious and slimie humour, which resorting to the bones, that are of their own nature cold and drie, waxeth hard, and cleaueth to some bone, and in procesle of time becommeth a bone. The signes be these. The horse wil halte, & the hard swelling is apparant to the ete, being higher thã any place of the cronet. The cure according to Martin, is thus. First, wash it well with warme water, and shaue away all the haire, so as the sore place may be al discouered. Thẽ scarifie it lightly with the point of a rasor, so as ỹ bloud may issue forth. Then if the sore be broad, take of Euforbiũ one ounce, of Cantharides halfe an ounce, broken both into fine powder, and of oile de Baie one ounce, and if the sore be but little, the one halfe of this may serue. Boyle these

things

things together, stirring them continually least it run ouer: and with two or three feathers, lay it hoyling hot vnto the sore, and let not the horse stirre from that place for halfe an houre after. Then carry him into the stable, both vsing & curing him for the space of nine dayes, in such order as hath beene said before in the chapter of the splent. But when the haire beginneth to grow againe, then fire the sore place with right lines from the pastern downe to the coffin of the hoofe, and let the edge of the drawing iron be as thicke as the backe of a meate knife, & burne him so deepe as the skinne may looke yellow: that done, couer the burning with pitch, and rosen molten together, & clap theron flocks of the horses owne colour, or somewhat nigh the same, & about three dayes after, lay againe some of the last mentioned plaister, or ointment, and also new flocks vpon ỹ old, & there let them remaine, vntill they fal away of themselues. But if these ringbones, or knobs, breede in any other place, than in the cronet, you shal cure them, as is before said, without firing them.

## Of the crowne scab. Chap. Cxli.

This is a kinde of filthy and stinking scabbe, breeding round about the feete vppon the cronets, and is an euilsh and painfull disease, called in Italian Crisaria. It seemeth to come by meanes that the horse hath vnnne bred in some cold wet soile, striking corrupt humors vp to his feet, & therefore the horse that hath this greise is worse troubled in Winter than in Summer. The signes be these. The haire of the cronets will be thin, and staring like bristles, and the cronets wil be alwayes mattering, and run on a water. The cure, according to Martin, is thus. Take of sope, of hogges grease, of each halfe a pound, of bole Armony a little, of turpentine a quarterne, and mingle them wel together, and make a plaister, and bind it fast on, renewing it euerie day once, vntil it leaue running, and then wash it with strong vineger being lukewarme euery day once, vntill the sore be cleane dried vp, & let him come in no wet, vntil he be whole.

Of

Of hurts vpon the cronet by crosing one foote ouer another, which the *Italians* cal *Suprapoſte*. Chap. cxlii.

MArtin. Wash it wel with white wine, or with a litle stale, and then lay vnto it the white of an Eg mingled with a litle chimnie swte and salt, and that will dry it vp in thre or foure dayes, if it be renewed euery day once.

Of the quitter bone. Chap. Cxliii.

THis is a hard round swelling vpon ỹ cronet, betwixt ỹ hele & the quarter, and groweth most commonly on ỹ inside of the fot, & is called of ỹ Italians, Setula, or Seta. It cõmeth by meanes of grauel gathered vnderneath ỹ shoe, which fretteth ỹ hele, or else by the cloying or pricking of som nail euil drawn, ỹ anguish wherof loosens ỹ grisle, & so breedeth euil humors, wherof the quitterbone springeth. The signes be these. The horse wil halt, & ỹ swelling is apparãt to the eie, which in foure or fiue daies cõming to a head, wil break out with matter at a litle deepe hole like a Fistula. The cure, according to Martin, is thus. First burn about the quitterbone with a hot iron, in maner of half a circle, and then with the same iron draw another right strike through the middest thereof. Then take of Arsenicke the quantitie of a Beane beaten into fine powder, and put it into the hole, thrusting it downe to the bottom with a quil, and stop ỹ mouth of the hole with a litle towe, and bind it so fast with a cloth, and cord, as the horse may not come at it with his mouth, and so let it rest for that day. And the next day, if you se that the sore looketh blacke within, then it is a signe that ỹ Arsenicke hath wrought well, and done his part. Then to allay the burning therof, taint the hole with flax dipt in hogs grease, and turpentine, molten and mingled together, and couer the taint with a bolster of tow dipt also in ỹ ointment aforesaid, continuing so to do euerie day once, vntill you haue gotten out ỹ core. Then shall you se whether ỹ loose grisle in ỹ bottome be vncouered or not: and if it be not vncouered, thẽ feel with your finger, or with a quil, whether

you

you be nigh it or not. And if you be, then raise the grissle with a little crooked instrument, and pull it cleane out with a paire of small nippers meet for the purpose. That done, taint it againe with a fal taint dipt in the foresaid ointment, to asswage the anguish of the last dressing, and stoppe it hard, to the intent that the hole may not shrinke together or close vp: and the next day take out that taint, & taint it a new with the salue or ointment taught in the chapter of the shackel gall, renewing it every day once vntill it be whole, keeping alwaies the mouth of the sore as open as you may, to the intent that it heale not vp too fast, & let not the Horse come in any wet, nor travel, vntil he be perfectly whole.

## Of the Grauelling. Chap. cxliiii.

THis is a fretting vnder the sole, most commonly in the inside, and sometime in the outside, and somtime in both sides together of the heele. It commeth by meanes of little grauel stones getting betwixt the hoove, or calking, or sponge of the shoe, which by continual labour and treading of the horse, doth eate into the quick, and the rather, if his heele bee soft and weake, or that the shoe doe lie flat to his sole, so as the grauel being once gotten in, cannot get out againe. The signes be these. The horse wil halt, and couet to tread all vpon the toe, to saueur his heel. The cure, according to Martin, is thus. First pare the hoove, and get out the grauel with a cornet, or drawer, leaning none behind, for if you do, it wil breed to a quitter bone. That don, stop him with turpentine and hogs grease molten together, and laid on with a little towe or flaxe, and then clap on the shooe to keepe in the stopping, renewing it euery day once vntil it be whole. And sutter the horse to come in no wet, vntil he be throughly whole. If a grauelling bee not wel stopt to keepe downe the flesh, it wil rise higher then the hoove, and not onely require more businesse in bolstering it, but also put the horse to more paine.

## Of Surbating. Chap. cxlv.

THis is a beating of the hoove against the ground, called of the Italians Sobattitura, it cõmeth somtime by means of euill shooing

showing, lying too flat to his foot, or by going long bare foote, and sometime by the hardnesse of the ground, and high lifting of the horse. And those horses that be flat footed, ye coffins thereof are tender and weake, but most commonly subiect to this sorance. The signes be these: the horse wil halt on both his forelegs, and go stiffly, and creeping, as though he were halfe foundered. The cure, according to Martin, is thus: take off his shoes, pare him as little as may be, and if the shoes be not easie, that is to say, long, large, and hollow inough, then make them so, & tack them on againe with foure or fiue nails. That done, clop his feet with bran, and hogs grease boyld together, so hot as may be, and also couer al the coffin round about with the same, binding al in together with a cloth, and a list fastened about the ioint, renewing it euery day once, vntil it be whole, & giue the horse during that while warme water, and let him stand dry and warme, and not be trauelled, vntil it be whole.

## Of a pricke in the sole of the foot, either by treading on a naile, or any other sharpe thing that doth enter into the foote. Chap. Cxlvi.

The signes bee these. If a man bee on his backe when hee treadeth on any such thinge, hee shall feele that the horse will lift vp his foote, and couet to stand still to haue helpe. And if it chance at any other time, the halting of the horse, and the hurt it selfe wil shew. The cure, according to Martin, is thus. Pul off the shoe, & pare the foot, and with a drawer vncouer the hole, making the mouth so broad as a two peny peece, then tack on the shoe agin. That done, stop it, by powring into the hole turpentine and hogs grease molten together, and lay some flaxe, or towe vpon it, and then stop al the horses feete with horsedung, or rather with cowdung, if you can get it, & splent it either with sticks, or else with an old shoe sole, so as the stopping may abide in, renewing it euery day once til it be whole, & let the horse come in no wet. If this be not well cured, or looked to in time, it wil cause the howe to breake aboue, & to loosen round about, & perhaps to fal cleane away. But if you see that it begins to breake aboue, then make a greater issue beneath by

opening the hole wider, and taking more of the sole away. that the flesh may haue the more libertie. Then take of bole Armony halfe a quarterne, Beane flower, and two egges. Beate them, and mingle them wel together, and make a plaister therof vpon towe, and lay it round about the cronet, bind it fast on, and so let it remaine the space of two dayes, and then renew it againe, not failing so to doe euery two dayes, vntil you see it ware hard and firme aboue. For this plaster being restrictiue, wil force the humors to resort al downward, which must be drawn out with turpentine and hogges grease as before, vntill it leaue mattering, and then dry it vp with burnt Alom beaten to powder, & strowed vpon it, with a little flare laid againe vpon that, continuing so to doe euerie day once, vntill it be hardened, and let not ỹ horse come in any wet, vntill it be whole.

## Of the Figge. Chap. Cxlvii.

IF a horse hauing receiued any hurt, as before is said by canel, naile, bone, splent, or stone, or otherwise in the sole of his foote, & be not wel dressed & perfectly cured, there wil grow in that place a certaine superfluous peece of flesh, like a figge: and it wil haue little graines in it like a fig, & therfore is rightly called of ỹ Italians Vn fico, that is to say, a fig. The cure wherof, according to Martin, is thus. Cut it cleane away with a hot iron, and kéep the flesh downe with turpentine, hogs grease, and a little wax laid on with towe or flare, & stop the hole hard, that the flesh rise not, renewing it once a day, vntill it be whole.

## Of a Retreate. Chap. cxlvii.

THis is the pricking of a naile, not wel driuen in ỹ shoing, & therfore pulled out again by ỹ Smith, & is called of ỹ Italiãs Tratta messa. The cause of ỹ pricking may be partly, ỹ rash driuing of ỹ smith, & partly ỹ weaknesse of ỹ naile, or ỹ hollownes of the naile in ỹ shank. For if it be too weak, ỹ point many times bendeth awry into ỹ quick, when it should go right forth again, if the shanke be hollow, it shattereth and shiuereth in ỹ driuing, into two parts, wherof one part raceth the quick in pulling out,

or else perhaps breaketh clean asunder, and so remaineth still behind, and this kind of pricking is worse than a cloying because it will rankle worse, by reason of the claw, remaining in the flesh. The signes be these. If the Smith that driueth such a nail be so lewde, as he will not looke vnto it, before the horse depart, then there is no way to know it, but by the halting of the horse, and searching ỹ hoone first with a hammer by knocking vpon euery clinging. For when you knock vpon that naile, where ỹ griefe is, the horse will shrinke vp his foote. And if that will not serue, then grope the hoone with a paire of pinsons round about, vntill you haue found the place grieued. The cure, according to Martin, is thus. First put off ỹ shoe, & then open ỹ place grieued with a butter, or drawer, so as you may perceiue by feeling or seeing, whether there be any peece of naile or not: if there be, to pull it cleane out, and to stop the hole with turpentine, wax and sheeps sewet molten together & so powred hot into the hole, and then lay a little towe vpon it, and clap on ỹ shoe again, renewing it thus euery day, vntil it be whole, during which time, let not the horse come in any wet, & it must be so stopped, though it be but prickt without any peece of naile remaining. And if for lack of looking to in time, this Retreate causeth the hoone to breake aboue, then cure it with the plaister restrictiue in such order as is mentioned in the last chapter sauing one before this.

## Of cloying. Chap. cxlix.

CLoying is the pricking of a whole naile called of ỹ Italians Inchiodatura, passing through the quick, & remaining still in the same, and is clenched as other nailes be, and so causeth the horse to halt. The grieued place is known, by searching with ỹ hãmer & pinsons, as is before said. If the horse halt immediatly, then pull off his shoe, and open the hole, vntil it begin to bleed, & stop it with ỹ ointment aforesaid in the chapter of the Retreate, & clap on the shoe againe, & the hoone may be so good, & the harm so little, as you may trauel him immediatly vpon it: but if it be rankled, then renew the stopping euery day once, let him come in no wet, vntill it be whole.

## Of looſening the hooue. Chap. Cl.

THis is a parting of the hœue from the cronet, called of the Italians, Diſſolatura del vnghia: which if it be round about, it commeth by meanes of foundering: if in part, then by the anguiſhe, cauſed by the prickinge of ſome canell naile, pearcing the ſole of the foote, or by ſome quitterbone, retreat, graueling, or cloying, or ſuch like thing: ỹ ſignes be theſe, When it is looſened by foundering, then it wel breaketh firſt in the fore part of the cronet, right againſt the toes, becauſe the humor doth conet alwaies to deſcend towards the toe. Againe, when the pricking of a canell naile or ſuch like cankered thing is ỹ cauſe, then the hœue will looſen round about, equally euen at the firſt. But when it proceedeth of any of the other hurts laſt mentioned: then the hœue wil breake right aboue the place that is offended, and moſt commonly wil proceede no further. The cure, according to Martin, is thus. Firſt, of which ſoeuer of theſe cauſes it procedes, be ſure to open the hoſe in the ſole of the foote, ſo as the humour may haue frée paſſage downward, and then reſtraine it aboue with the plaiſter reſtrictiue before mentioned, and in ſuch order as is there written, and alſo heale vp the wound, as is before taught in the chapter of a pricke in the ſole of the foot.

## Of caſting the hooue. chap. cli.

THis is when the coffin falleth cleane away from the foot, which commeth by ſuch cauſes as were laſt rehearſed, and is ſo apparant to the eie, as it needeth no ſignes to know it. The cure, according to Martin, is thus. Take of tarpentine one pound, of tarre halfe a pinte, of vnwrought ware halfe a pound, of ſhéepes ſewet halfe a pound, of ſallet oyle halfe a pint. Boile all theſe thinges together, and ſtirre them continually vntil they be throughly mingled, and compact togither. Then make a boote of leather with a good ſtrong ſole méete for the horſes foote, to bee laced or buckled about the paſtern, and dreſſe his foote with the ſalue aforeſaide laide vpon flare or towe, & bolſter or ſtuffe his foot with ſoft flax, ſo as the boote may greiue him no maner of way, renewing it euery day once vntil it be whole, and then put him to graſſe.

Of

## Of the hoove bound. Chap.clii.

This is a shrinking of all the whole hoove. It commeth by drought, for that the hooves perhappes are kept too drie, when the horse standeth in the stable, and sometime by meanes of heate, or of ouer straite shooing. The Italians call the horse thus grieued incastellado. The signes be these. The horse wil halt, and the hooves will be hot, & if you knock on them with a hammer, they wil sound hollow like an empty bottle: and if both the fóet be not hoove bound, ỳ fore foote wil bee lesser than the other indeed, & appeare so to ỳ eie. The cure, according to Martin is thus. Pull off ỳ shoes, & shoe him with halfe moone shooes called Lunette, ỳ order and shape whereof you shall finde hereafter among ỳ other shoes, and rase both the quarters of the hoove with a drawer, from the coronet vnto the sole of the fóot, so déep as you shal sée the deaw come forth. And if you make two rases on each side, it shal be so much the better, and inlarge the hoove the more. That done, annoint all the hoove aboue, nere vnto the coronet round about, with the ointment prescribed before, in the chapter of casting ỳ hoove, continuing so to doe euerie day once vntill he begin to amend, and let him be ridden vpon some soft wet ground an houre or two euery day once for the space of a moneth, and if he goeth not well at the monethes end, then take off the halfe shoes and pare all the soles, frushes & all, so thin as you may sée the deaw come forth, and tack on a whole shoe, & stop all the fóot within with hogs grease and bran boiled together, and laid hot to the fóot, renewing it euery day once the space of nine dayes, to ỳ intent the sole may rise. But if this will doe no good, then take away the sole cleane and clap on a whole shoe, & stop the fóot with nettles and salt braied together, renewing it once a day, but not ouer harde, to the intente the sole may haue liberty to rise: and being growne againe, let him be shodde with the lunets and so sent to grasse.

## Of the running Frush. Chap.cliii.

The Frush is the tenderest parte of the hoove towardes the heele, called of ỳ Italians Fettone, & because it is fashioned

like a forked head, the Frenchmen call it Furchette: which word our Ferrers, either for not knowing rightly how to pronounce it, or else perhaps for easinesse sake of pronunctation, do make it a monasyllable, and do shortly pronounce it the Frush: in which Frush breedeth many times a rottennesse or corroption proceeding of humors that commeth out of the legge, whereby the leg is kept cleane from the windgalles, and all other humours and swellings, by meanes that the humors haue passage that waie. Notwithstanding, the discommoditie of this sorance is greater than the commoditie, because it maketh the horses foot so weake and tender, as he is not able to tread vpon any hard ground. The signes be these. The horse wil hault, and specially when the passage of the humour is stopt with any grauell gathered into the Frush, and not being stopt it wil continually runne, the sauour whereof will be so strong as a man is not able to abide it, and in some places it wil looke raw. The cure according to Martin is thus. First, take off ỳ shoe and pare away all the corrupt places and make them raw, so as you may see the water issue out of the raw places: then tacke on ỳ shoe again, being first made wide and large inough. That done, take of sote one handfull, of salt as much, bruse them well together in a dish, and put therunto the white of three egges, and temper them altogether, & with a little tow dipt therin stop all the foot, and specially the Frush, and splent it so as it may not fall out, renewing it once a day ỳ space of seauen dayes, and then hee wil be whole. During which time, let the horse rest, and come in no wet, at the seuen daies end leaue stopping him, and ride him abroade, and alwayes when he commeth in, let his sore foot be cleane washed, that no grauel remaine therein, without doing any more vnto him.

## Of diseases or griefs indifferently incident to any part of the body, but first of the Leprosie or vniuersall mangines, called of the olde writers *Elephantia*. Chap. cliiii.

THis is a cankered mangines spreading ouer all the body, which commeth of aboundance of melancholie, corrupt, and filthie

filthie blood. The signes be these. The horse will be all mangie and scurvie, ful of scabs, and rawe plots about the necke, and evil favoured to loke on, and alwayes rubbing and scratching. The cure, according to Martin, is thus. Let him blood ỳ first day in the one side of the neck, and within two dayes after on the other side of the neck: & within two dayes after that, in the flanke veines, and last of all, in the veine under the taile. Then wash all the sore places with salt brine, and rubbing them hard, with a wispe of straw hard twisted, so as they may bléede well, and bée all raw. That done, annoint the places with this ointment: take of quick siluer one ounce, of hogs grease, one poũd, of brimstone beaten into powder a quarterne, of Rape oile a pinte. Mingle these thinges wel together, vntil the quicke siluer be throughly incorporated with the rest, and having annointed all the rawe places with this ointment, make it to sincke into ỳ flesh, by holding and weauing vp and downe ouer it, a hot broad bar of irõ, & then touch him no more again, ỳ space of two or three dayes: during which time, if you sée that he rubbeth stil in any place, then rub that place againe with an old horsecombe, to make it rawe, and annoint it with fresh ointment. But if al this wil not helpe, then with a hot iron round & blunt at the point, so big as a mans little finger, burne all ỳ mangie places, making round holes, passing onely through the skin, and no further. For which intent it shal be néedfull, to pull the skin first from ỳ flesh, with your left hand, holding it stil, vntill you haue thrust ỳ hote iron through it, and let euery hole be a spanne one from another, & if néed be, you may annoint those holes with a little sope, and let the horse be thin dieted, during his curing time.

## Of the Farcin, called in *Italian* of some, *Il verme*, and of some *Farcina*. Chap. Clv.

This is a kind of créeping vlcer growing in knots, following alongst some veine, and it procédeth of corrupt blood ingendred in the body, or elle of some outwarde hurt, as of spurgalling, or of the biting of some other horse, or of the biting of tickes, or of hogs lise, or such like casualties. Or if it be in the legge: it may come by interfering. It is easily knowne,

partly by the former description, & also it is apparant to the eie. The cure, according to Martin, is thus. Let him bloud in that vein where it commeth, as nigh the sore place as may be, and let him bleed wel. Then fire euery knot one by one, taking the knot in your left hand, & pulling it so hard as you can from his body, to the intent you may the better pearce the knot, with a round, blunt, hot iron, of the bignesse of a mans forefinger, without doing the body any hurt, and let the matter out, leauing none vnburned, be it litle or much. That don, anoint euery knot so burned, with hogs grease warmed euery day once, vntil the coares bee ready to fall awaie, and in the meane time prepare a good quantity of old vrine: and when you see the coares ready to fal, boile the vrine, and put therein a little Copras, and salt, and a few strong nettles, & with that water being warme, wash out all the coares, and al the corruption. That done, fill euery hole immediatly with ỹ powder of fleet lime, continuing thus to do, euery day once, vntill the holes be closed vp: and if any be more ranker than others, fil those with Verdigrease, and during this cure, let the horse be thinly dieted, that is to say with straw and water onely: vnlesse it be now and then to giue him a loafe of bread. For the lower he be kept, the soner he wil be whole. And in any wise let his necke bee yoked in an old bottomlesse paile, or els with sharp staues to keep him from licking the sores, & the lesse rest he hath, the better.

Of the Canker, called of the Italian, Il Cancro. Chap. clvi.

A Canker is a filthie creeping Vlcer, fretting and gnawing the flesh in greate breadth. In the beginning it is knottie, much like a Farcine, and spreadeth it selfe into diuerse places, and being exulcerated, gathereth together at length into one wound or sore. This proceedeth of a melancholy and filthy bloud ingendred in the body, which if it be mixt with sharp and salt humours, it causeth the more painful and grieuous exulceration, & sometime it commeth of some filthy wound that is not cleanly kept, ỹ corrupt mater wherof cankers other clean parts of the body. It is easie to be known by ỹ descriptiõ before written. The cure wherof, according to Martin, is thus. First let him

bloud

blood in those veins that be next vnto the sore, and take inough of him. Then take of Alum halfe a pound, of grene Copporas as much, of white copporas one quartern, and a good handful of salt: boile all these things together in faire running water, from a pottle to a quart. And this water being warme, wash the sore therewith with a clout, and then sprinkle thereon the powder of slecked lime, continuing so to doe euery day once the space of fiftéene daies: and if you see that the lime doe not mortifie the rank flesh, and keepe it from spreading any further, then take of Sope halfe a pound, of quicke siluer half an ounce, and beate them together in a pot vntil the quick siluer be so wel mingled with the Sope, as you can perceiue none of ẏ quicksiluer in it. And with an iron slice, after that you haue washed the sore with the strong water aforesaid, couer ẏ wound with this ointment, continuing thus to doe euery day once, vntil the canker leaue spreading abroad. And if it leaue spreading, and that you se ẏ ranke flesh is mortified, and that the edges begin to gather a skin, then after ẏ washing, dresse it with the lime as before, cõtinuing so to do, vntil he be whole. And in ẏ dressing, suffer no filth that cõmeth out of the sore, to remaine vpon any whole place about, but wipe it cleane away, or else wash it away with warme water. And let the horse, during this cure, bee as thinly dieted as may bee, and throughly exercised.

## Of the Fistula, called of the *Italians*, *Fistula*. Chap. clvii.

A Fistula is a deepe hollowe crooking vlcer, and for the most springs of maligne humour, ingendered in some wound, sore, or canker, not throughly healed. It is easie to knowe by the description before made. The cure according to Martin, is thus. First search the depth of it with a quill, or with some other instrument of Lead, that may bee bowed euerie waie, meet for ẏ purpose. For vnlesse you finde the bottom of it, it will be verie hard to cure. And hauing found ẏ bottom, if it be in such place as you may boldly cut and make the way open with a lancet, or rasor, then make a slit right against ẏ bottom, so wide as you may thrust in your finger, to feele whether there bee ante bone or grissle perished, or spungie or loose flesh, which must be gotten

gotten out, and then taint it with a taint of flaxe dipt in this oint-
ment. Take of hony a quarterne, and of Verdigrease one ounce
beaten in powder. Boile them together, vntill it loke redde, stir-
ring it continually, least it runne ouer, and being lukewarme,
dresse the taint therewith, and bolster the taint with a bolster of
flaxe. And if it be in such a place, as ỳ taint cannot conueniently
be kept in with a band, then fasten on each side of the hole, two
ends of a shoomakers thread right ouer the bolster, to kéep in ỳ
taint, which ends may hang there as two laces, to tie and vntie
at your pleasure, renewing the taint euery day once, vntill the
sore leaue mattering. And then make the taint euery day lesser
and lesser, vntil it be whole. And close it vp in the end, by sprink-
ling theron a litle sleakt lime. But if ỳ Fistula be in such a place
as a man can neither cut right against the bottome, nor nigh ỳ
same: then there is no remedy, but to poure in some strong wa-
ter, through some quill, or such like thing, so as it may go to the
bottome, and dry vp all the filthy matter, dressing him so twise a
day, vntill the horse be whole.

## Of an Auburie. Chap. clviii.

THis is a greate spongie wart full of blood, called of the Italians, Moro, or Selfo, which may growe in any place of the bodie, and it hath a roote like a Cockes stone. The cure, according to Martin is thus. Tie it about with a thread, so hard as you can pull it, and the thread will eate in by little and little, in such sort, as within seuen or eight dayes, it will fal away by it selfe. And if it be so flat as you can binde nothing about it, then take it away with a sharp hot iron, cutting it round about, and so déepe as you leaue none of the root behinde, and dry it vp with Verdigrease. Russius saith, that if it growe in a place ful of sinewes, so as it cannot be conueniently cut away with a hote iron, then it is good to eat out the core with the powder of Realgar, and then to stop ỳ hole with flaxe dipt in the white of an egge for a day or two: and lastly, to dry it vp with the powder of vn-sleakt lime, and hony, as before is taught.

Of

*Of wounds. Chap. clix.*

VVOundes comme by meanes of some stripe or pricke, and they are properly called wounds, whē som whole part is cut off or broken. For a wound according to the phisicians, is defined to be a solution, division, or parting of ẏ whole. For if there be no such solution or parting, then me thinkes, it ought rather to be called a bruse than a wounde. And therefore woundes are most commonly made with sharpe or pearcing weapons, and bruses with blunt weapons. Notwithstanding, if by such blunt weapons, any part of the whole be evidently broken, then it ought to be called a wound as wel as the other. Of wounds some be shallow, and some be déepe & hollow. Again, some chance in the fleshy parts, and some in the bony, & sinewy places. And those that chance in the fleshy partes, though they be very déepe yet they be not so dangerous as the other, and therefore wee will speake first of the most dangerous. If a horse haue a wound newly made, either in his head, or in anye other place that is ful of sinews, bones, or gristles, first, Martin would haue you to wash ẏ wound wel with white wine warmd. That done, to search the bottome of the wound with some instrument mēt for ẏ purpose, suffring it to take as little wind in the meane while as may be. Then hauing found ẏ depth, stop the hole close with a clowt, til your salue be ready. Then take of turpentine of Mel rosatum, of oile of roses, of ech a quarterne, and a little vnwrought wax, and melt them together: stirring them continually that they may be wel mingled togither, and if it be a cut, make a handsome rol of cleane picked towe, so long and so big as may fil the bottome of the wounde, which for the most parte is not so wide as the mouth of the woūd, then make another rol greater than that to fil vp ẏ rest of the wound, euen to the hard mouth, and lette both these rolls be annointed with the ointment afore said luke warme. But if the hurt be like a hole made with some pricke, then make a stiffe taint, such a one as may reach the bottome, annointed with the foresaide ointmente, and boulster the same with a little towe. And if the mouth be not wide inough, so as the matter may easily run forthe, if it be in such place as you may doe it without hurting any sinewe, then giue it a pretty slit

slit from the mouth downeward, that the matter may haue the freer passage. And in any wise haue a speciall regard, that the taint may be continually kept in by one meanes or other, as by binding or staying the same with the ends of shoomakers thread as is aforesaid. And if the hole be deepe, and in such place as you may not cut it, then make your taint of a spunge, and so long as it may reach to ỳ bottome: & the taint being made somwhat ful, with continuall turning & wrything of it, you shal easily get it downe, and then dresse ỳ wound with this twise a day, cleansing the wound euerie time with a little white wine lukewarm. For this sponge annointed with ỳ ointment aforesaid, will both draw and suck vp all the filthy matter & make it so faire within as is possible: and as it beginneth to heale, so make your taint euery day lesser and lesser, vntil it be ready to close vp, & neuer leaue tainting it, so long as it wil receiue a taint, be it neuer so shorte. For hastie healing of woonds breedeth Fistulas, which properly be old wounds, and therefore must be cured like Fistulas.

*Of wounds in the fleshie parts. Chap. Clx.*

VSe the same ointment and maner of procéding as before. And if the wound be very large, then to kéepe in ỳ taint or rolles, you shal be faine to put two or three shoomakers ends on each side of the sore, leauing them so long as you may tye them together and losen them when you wil like laces.

*Of a hurt with an arrowe. Chap. Clxi.*

IF the horse be hurt with an arrow, taint the hole with hogges grease and turpentine moulten together, renewing it euerie day once vntill it be whole.

*Of pulling out shiuers or thornes. Chap. Clxii.*

MArtin saith, that if it be not very déepe, sope being layde vnto it all night, will make it to appeare, so as you may pull it out with a paire of nippers. But if it be very déep, then you must open the place with a knife or lancet, and get it out, & afterward heale vp the wound as hath béen taught

you

you before. Rusius saith, that the roles of reed being stampt and mingled with hony wil draw out any thorne, or shiuer: and so wil snailes, as he saith, being stampt and wrought with fresh butter: & if the place be swollen, hee saith it is good to mollifie it with a plaister made of wormelwoode, Pertorie, Beares sote, hogges grease, and hony, which wil asswage any new swelling, that commeth by stripe, or otherwise.

## Of brusings or swellings. Chap. clxiii.

MArtin. First pricke it with a fleame. Then take of wine lees a pinte, as much wheate flower as wil thicken it, and an ounce of cumin. Boile them together, and lay this somwhat warme vnto it, renewing it euery day once vntill the swelling either depart, or else come to a head. And if it do, then lance it, and heale it vp as a wound.

## Of sinewes cut, prickt, or broosed. Chap. clxiiii.

TAke of tarre, and Beane flower, and a little oile of Roses, and lay it hote vnto the place. And if this do no good, then take wormes and sallet oile fried together, or else the ointment of wormes, which you shal haue at the Apothecaries, and one of these wil knit it againe, if it be not cleane asunder.

## How to cure a wound made with harquebush shot. Chap. clxv.

MArtin. First seeke with an instrument whether the pellet remaine within or not, and if it doe, you must get it out with an instrument meete for the purpose. Then to kill the fire, take a little vernish, and thrust it into the wounde with a feather, annointing it wel within with the feather, and after that stoppe the mouth faire and softly with a little soft flare, to keepe the winde out: & on the outside, charge all the swelling with this charge: take of bole Armony a quarterne, of Linseede beaten into powder half a poond of bean flower as much, and three or foure egs shelles and all, and of turpentine a quarterne, and a quart of vineger, & mingle them wel together ouer the

the fire, and being somwhat warme, charge all ỳ sore place with part therof, & immediatly clap a cloth, or a peece of leather vpon it, to keepe the wound from the cold aire, continuing both to annoint the hole within with vernish, and also to charge the swelling without, the space of foure or fiue daies: & at the fiue daies end, leaue annointing of it, & taint it with a taint reaching to the bottome of the wound, & dipped in turpentine and hogs grease molten together, renewing it euery day twise, vntil the fire bee throughly killed: which you shal perceiue by the mattering of the wound, and by falling of the swelling: for so long as the fire hath the vpper hand, no thicke matter wil issue out, but onely a thin yellowish water, neither wil the swelling asswage: And thē take of turpentine, washed in nine seuerall waters, halfe a pound, and put therunto three yolkes of egges, and a little saffron, and taint it with ointment, renewing it euery day once, vntill the wound be whole.

## Of burning with Lime, or any other fierie thing. Chap. clxvi.

MArtin. First wash away the Lime, if ther be any, wt warm water. Then kil ỳ fire with oile & water beaten together, dressing him so euery day vntil it be al raw, and then annoint it with hogges grease, & strow therupon ỳ powder of slecked lime, dressing him so euerie day once, vntil it be whole.

## Of the biting of a mad dog. Chap. clxvii.

IF a horse be bitten with a mad dogge, the venome of his teeth wil not onely paine him extreamly, but also infect al his blood and make him to die mad. The cure, according to the old writers, is thus. Take of Goats dung, of flesh that hath laid long in salt, and of the herbe Ebulus, called of some Danewort, of each halfe a pound, and xl. Walnuts. Stampe al these things together, and lay some therof vnto ỳ sore, and this wil sucke out the venome, and heale the wound. It is good also to giue the horse Treacle, and Wine to drinke: yea, and some would haue the sore place to be fiered with a hot iron.

Of

Of hurts by tuskes of a Boare. Chap. Clxviii.

IF a horse be hurt with the tuskes of a Boare, lay Vitriol, and Copozas thereunto, and the powder of a dogs head being burned, but let the tongue be first pulled out & cast away.

To heale the biting or stinging of Serpents. Chap. clxix.

LAurentius Rusius. Take a good quantitie of the hearb called Sanicula, stampe it, and distemper it with the milke of a Cow, that is all of one colour, and giue him that to drink, & that wil heale him.

Another medicine for the same purpose.

TAke a platter of Onions, hony, & salt, stampt & mingled together, and lay that to the sore place, & giue the horse wine, & treacle to drinke. Absirtus wold haue you to giue him white Peper, Rewe, and Time, to drinke with wine.

Of drinking of horseleaches. Chap. clxx.

IF a horse chance to drinke horseleaches, they wil continuallie sucke his bloud, and kil him. The remedy, according to Absirtus, is to poure oile into ỹ horses mouth: which wil make them to fall away and kill them.

Of swallowing downe hens dung. Chap. clxxi.

IF a horse swallow downe hens dung in his haie, it wil fret his guts, & make him to void filthy matter at the fundament. For remedie whereof, Absirtus would haue you to giue him drinke made of smallage seed, wine, and hony, & to walk him throughly vpon it, that he may empty his bellie.

Of lice, and how to kill them. Chap clxxii.

THey be like Geese Lice, but somewhat bigger, they will breede most about the eares, necke, and taile, and ouer all the body. They come of pouertie and the Horse will be alwayes rubbing, and scratching, and wil eate his meat, and not prosper

per withall, and with rubbing he will breake all his mane, and taile. The cure, according to Martin, is thus. Annoint the place with sope and quicksilver, wel mingled together, and to a pound of sope, put halfe an ounce of quicke siluer.

## How to saue horses from the stinging of flies in Summer. Chap. Clxxiii.

ANnoint the horses cote with oile, and Bay berries, mingled together, or tie to ỹ headstal of his collar, a sponge dipt in stronge Vineger, or sprinkle the stable wt water, wherin hearbe Grace hath bæn laid in steepe. Or perfume ỹ stable with Iuie, or with Calamint, or with Gith burned in a pan of coles.

## Of bones being broken or out of ioint. Chap. clxxiiii.

FEw or none of our Ferres doe entermeddle with any such grieses, but doe referre it ouer to the bone setter, whose practised hand, I must needes confesse, to be needfull in such businesse. Notwithstanding, for that it belongeth to the Ferrers art, and also for that the olde writers doe make some mention thereof, I thought good not to passe it ouer altogether with silence: Albeit, they speake only of fractures in the legges beneath the knée. For they make little mention or none of bones abone the knée, taking them to bee incurable, vnlesse it be a rib, or such like. If any bone then be brokē in the legge, it is easie to perceiue, by fæling the roughnesse and inequalitie of the place grieued, one part being higher then another: the cure whereof, according to Absirtus, and Hierocles, is in this sort. First, put ỹ bone againe into his right place. That done, wrap it about with vnwasht woll, binding it fast to the leg with a small linnen roller, soked before in oile and vineger mingled together. And let that roller be laid on, as euen as is possible: and vpon that, lay againe more wooll, dipt in oile and vineger, and then splent it with three splents, binding them fast at both ends with a thong, and let the horses leg be kept streight, and right out, the space of forty daies, and let not the bonds be losened abone three times in

twenty

twenty daies, vnlesse it shrinke, and so require to be new dressed, and bound again. But faile not every day once, to poure on the sore place, through the splentes, oile and vineger, mingled together. And at the forty daies end, if you perceiue that the broken place be solowred togither again with some hard knob or grissle: then losen the bounds, so as the horse may go faire and softly, vsing from that time forth to annoint the place with some soft grease or ointment.

## Of bones out of ioint. Chap. Clxxv.

IF a horse knee, or shoulder be cleane out of ioint, and no bone broken, Martin saith the readiest way is, to binde all the foure legges togither, in such sort as hath beene taught before in the Chapter of Incorsing, and then to hoise the horse somewhat from the ground, with his heeles vpward, so shall the weight and peise of his body, cause the ioint to shoot in againe, into the right place: for by this meanes he pleasured not long since a friend and neighbor of his, who going with his Cart from S. Albons, towards his house, his Thiller fell and put his shoulder cleane out of ioint, so as he was neither able to rise, nor being holpen vp, could stand on his legges: to which mischance Martin being called, made no more ado, but taking his friends Cart rope, bound the horses legges all foure together, and with a lever thrust betwixt his legs and body, & the one end of the lever being staied vpon the Cart wheele; they putting their shoulders to the other end, hoised vp the horse cleane from the ground, ỹ peise of whose body made ỹ bone to returne into his right place, with such a loud knack, as it might be heard a great way off, and the horse immediatly had the vse of his legge, so as he drew in the Cart, and went also safe home without complaining thereof ever after.

## Certaine receiptes of plaisters, very good for broken bones, taken out of the old Authors, writing of horseleachcraft. Chap. clxxvi.

TAke of Spuma argenti, of Vineger, of each one pound, of Sallet oile halfe a pound, of Amoniacum, and of turpentine, of

ech three ounces, of Ware, of Rosen, of ech two ounces, of Bitumen, of Pitch, and of Verdigrease, of ech halfe a pound. Boile the Vineger, Oile, and Spuma argenti together, vntill it ware thicke: then put thereunto the pitch, which being molten, take the pot from ỹ fire, and put in the Bitumen, without stirring it at all: and that being also molten, then put in all the rest, and set the pot againe to ỹ fire, and let them boile all together, vntil they be all united in one. That done, straine it, and make it in plaisters forme, and this is called Hierocles plaister.

## Another receite for broken bones. Chap. clxxvii.

TAke of liquid Pitch one pound, of ware two ounces, of the purest & finest part of frankincense one ounce, of Amoniacū foure ounces of vnie Rosen, & of Galbanum, of ech one oūce, of vineger two pints. Boile first the vineger & Pitch together, then put in the Amoniacum, dissolued first in vineger, & after that all the rest of the foresaid drugs: and after they haue boiled altogether, & be united in one, strain it, & make it plaisterwise, & this is called Emplastrum flauū, that is to say, The yellow plaister.

## An ointment of broken bones. Chap. clxxviii.

TAke of old Sallet oile a quart, and put thereunto of hogs grease, of Spuma nitri, of ech one pound, and let them boile together, vntill it begin to bubble aboue, and let this ointment be very warme when you vse it.

HItherto of all the diseases belonging to a horse. Now therfore my promise made to you in ỹ beginning of this booke, to speak of those things wherin ỹ cure of all diseases doe consist, that is to say, in letting bloud, in taking vp of veins, in purging, and in giuing the fire; yea, and also order it selfe bindeth mee to treat of the said things presently, and first of letting bloud.

## In how many veines a horse may be let bloud, and to what end. Chap. clxxix.

AS touching the order, time of the yeare, mone and day, and other circumstāces belonging to letting of bloud, we haue sufficī-

sufficiently spoken already in the keepers office, in the xvii. chapter. It resteth therfore heere to shew you what veins should be opened when the horse is sick of any disease, according to Vegetius opinion. But first I will rehearse vnto you once again, in how many veines a horse may be let blood, and the rather for that in following Vegetius, I left out in the seuenth chap. of the keepers office, the two temple veines, which be the two first and principall veines of the head. A horse then may bee let blood in the two temple veines. Item, in the two eye veines, which are easie to finde in the face of the horse, somewhat beneath the eies. Item, in the two palate veines of the mouth. Item, in the two necke veines. Item, in ỹ two plat veines which be in the breast. Item, in the two forechigh veins. Item, in the foure shakle veines before. Item, in the two toe veines before. Item, in the two side veines, which may be otherwise called flank veins. Item, in the taile veine. Item, in the two hanch veines. Item, in the two hough veines. Item, in the foure shakle veines behind. Item in the two toe veins behind: so that by this account, a horse may be let blood in 31. veins. All which veins are easie inough to know, because that euery one lieth in a little gutter, which by feeling softly with your finger, you shall find immediatly. And Vegetius saith, that if a horse be pained with any grief in his head, ach, heauinesse, frenzie, falling euill, or such like, then it is good to let him blood in the temple veines with a fleam. If his eyes be watterish, blood shotten, or grieued with pinne, webbe, or hawe, then it is good to strike the eie veine with a fleame. If he haue anie heauinesse or wearinesse of body, or be diseased in the throat with the strangulion, quinize, or swelling of the artires, either within or without, then it is good to let him blood in the mouth, in the palate veins with a cornet. If he be vexed with an ague, or with any other disease, vniuersally hurting his bodie, then let him blood in the necke veins. If his griet be in the lungs, liuer, or in any other inward member, then let him blood in the breast veins, which we called before the plat veins. If he be grieued in the shoulder, then let him blood in the forehigh veins, aboue the knee, with a lancet, and that very warily, because that place is full of sinewes: and if hee be grieued in his iointes, then let him

blond in the shakel veines, and that warily, because that place is also ful of sinews. And if he be tolld on his forefeet by foundering or otherwise, then let him blond in the toe veines, making way first with your drawer, or ronet, in the howe to come to the vein. If he be diseased in the kidnies, reins, back, or belly, then let him blond in the flank veins, & in his taile: if he hath any griefe in his hips, or boughs, then let him blond in the hip or bough veines: & if his hinder legs, toynts, or feete, be grieued then let him blond in the shakell veines, and toe veines, as is before sayd.

The order of taking vp veines, and wherefore it is good. Chap. clxxx.

The order obserued by Martin is in this sort. First, if the horse be very curst and shrewd, then cast him vpon a dunghil, or some strawe, then hauing found the veine that you would take vp, marke well that part of the skin which couereth the veine, and pull that somewhat aside from the veine with your left thumbe, to the intent you may slit them with a rasor, without touching the veine. And cut no deeper than one lis through the skin, & that longst wise, as the veine goeth, and not aboue an inch long. That done, take away your thumbe, and the skin wil returne againe into his place, right ouer the veine, as it was before. Then with a cornet vncouer the vein and make it bare, and being bare, thrust the cornet vnderneath it, and raise it vp, so as you may put a shoomakers thred vnderneath, somewhat higher than the cornet, to knit the veine when time is. And if your cornet hadde a hole in the small end thereof to put in the thread, it should bee the easier done. Then the cornet standing so still, slit the veine longst wise that it may bleede: and hauing bled somewhat from aboue, then knit it vp with a sure knott, somewhat aboue the slit, suffering it to bleede onely from beneath: and hauing bled sufficiently, then knit vp the veine also beneath the slit with a sure knot, and fill the hole of the veine with salte, and then heale vp the wound of the skin with turpentine, and Hogges greasemolten together, and laid on with a little Flaxe. The taking vp of veines is very necessarie, and doth ease manie griefes in the legges: for the taking vp of the forehigh veines easeth Farcins, and swellinges of the legges, the taking vp of

the

the shakell veines before, easeth the quitter bone and swelling of the ioints, scabs, and crotches. The taking vp of ỹ hinder veines helpeth the Farcin, swellinges, and both the spauens: the taking vp of the shakel veines behind, helpeth swelling of the ioints, the paines, and kibed heeles, and such like diseases.

## Of purging with Purgation, or Glister. Chap. clxxxiii.

PUrgations is defined by the Physicians, to bee the emptying or voyding of superfluous humours, annoyinge the body with their euill qualitie. For such humours breede euill iuice and nutriment, called of the Physicians Cacochimia, which when it will not be corrected or holpen with good diet, alteration, nor by the benefit of nature and kindly heat, then it must needs be taken away by purgatiõ, vomit or glister. But forsomuch as horses are not wõt to be purged by vomit, as men be, I will speake here only of glisters and purgations. And first, because a horse is grieued with many diseases in his guts, & that nothing can purge the guts so wel as a glister, and specially the thick guts, I wish that our Ferrers would learne to know the diuersitie of glisters, to what end they serue, & with what drugs or simples they should be made, for as ỹ disease requireth so must the glister be made, some to ease griefs, and to allay the sharpenes of humors, some to binde, some to losen, some to purge euill humors, some to cleanse vlcers: but our Ferrers do vse glisters, only to losen the belly and for no other purpose: yea, few or none do that vnlesse it be Martin, & such as he hath taught, who is not ignorant, that a glister is ỹ beginning of purgation. For a glister, by cleansing the guts, refresheth ỹ vitall parts and prepareth the way before. And therfore whensoeuer a horse is surfetted and ful of euil humors, needing to be purged, and specially being pained in the guttes, I would wish you to begin first with a glister, least by purging him by medicine vpon the sudden, you stirre vppe a multitude of euil humors, which finding no passage downward because the guts be stopt with wind and dregges, doe strike vpwards, and so perhaps put the horse in great danger. But now you shall vnderstand that glisters be made of foure thinges, that is to say of decoctions, of drugges, of oiles, or such like vnctuous

matters, as butter or soft grease, and fourthly of diuers kinds of salt to prouoke the vertue expulsiue. A decoctiõ is as much to say as the broth of certain hearbs or simples boiled together in water vntill the third part be consumed. And sometime in stead of such decoction, it shall be needful perhaps to vse som fat broth, as the broth of Beefe, or of a sheepes head, or milke, or whaie, or som other such like liquor, and that perhaps mingled with hony and sugar, according as the disease shal require: the glister to be either lenitiue, that is to say, easing paine; or glutinatiue, that is, toyning together: or else abstersiue, that is to say, cleansing or wiping away filthy matter: of which decoction or broath being strained, you shal need to take three pintes or a quart at the least. And then into that you may put such drugs as shal be needfull, to the weight of three or foure ounces, according as the simples shall be more lesse violent. Of oile at the least halfe a pint, and of salt two or three drams, and then to be ministred luke warme with a horn or pipe made of purpose, when the horse is not altogether full panched but rather empty, be it in the forenoone or after noone. And as touching the time of keeping glisters in the body, you shal vnderstand, that to glisters abstersiue half an houre or lesse may suffice: to glisters lenitiue a lõger time if it may be: and to glisters glutinatiue, the longest time of all is most needfull.

## Or Purgations. Chap. clxxxiiii.

PVrgations for men may bee made in diuers sortes and formes, but horses are wont to bee purged onely with pilles or else with purging powders put into ale, wine or some other liquor. But the simples whereof such pilles or powders be made, would be chosen with iudgement, and aptly applied, so as you may purge away the hurtful humours, and not the good. Learne first therefore to know with what humour or humours the horse is grieued: be it Choler, Flegme, or Melancholie, and in what part of the bodie such humours doe abound, them what simples are best to purge such humours, and with what propertie, qualitie, & temperament they bee indued. For some be violent and next cousins to poison, as Scamonie,

or

or Coloquintida. Some againe are gentle, and rather meate than medicines, as Manna, Cassia, Whaie, Prunes, and such like. And some again be neither too violent, nor too gentle, but in a meane, as Rhewbarbe, Agarick, Sene, Aloes. The olde men did vse much to purge Horses, with the pulpe of Coloquintida, sometime with the rootes of wilde cucumber, and somtime with the broth of a sodden whelpe, mingled with Nitrum, and diuers other things, whereof I am sure I haue made mention before, in the curing of horses diseases. Notwithstanding I would not wish you to be rash in purging a horse after the olde mens example. For as their simples many times be very violent, so the quantities thereof by them prescribed are very much, & dangerous for any horse to take in these daies, in the which neither mã nor beast, as it semes, is of such force or strẽgth, as they haue bin in times past. And therfore, whẽsoeuer you wold purge a horse of any value, I would counsell you to purge him with such like kinds of purgatiõs as Martin vseth, wherof you haue had examples before in diuerse places. And whẽsoeuer you list for knowledge sake, to deale with other simples, to proue them first vpon such Jades, as may be well spared. For who so mindeth to purge a horse well, that is, to do him good, & no hurt, had need to consider many things, as the nature of the horses disease, and the Horses strength. Also the nature, strength, and quantitie of the medicine that he ministreth, the Region, or Country, the time of the disease, the time of the yeare, and day. For as the diseases and euill humours causing such diseases, be diuerse, so doe they require to be purged with diuerse medicines, diuerslie compounded, wherein consisteth a point of Art to be learned at the Phisicians hands, and not at mine. Againe, weake, delicate, and tender horses, may not be purged in such sort as those that be of a strong sturdy nature. And therfore in such cases, the quality, and quantity of the simples is not a little to be considered, neither is the hotnesse or coldnes of the region to be neglected, nor the time of the disease: For some require to be purged in ỹ very beginning, some not vntill the matter be throughly digested: and though ỹ disease procede perhappes of cold, and cold humours, yet a mã may not minister such hote things in summer, as he would do in

Winter; nor in the contrary case, such cold things in winter, as he would do in summer. And therefore the time and season of the year is specially to be obserued: yea, & the day, & time of the day. For the more temperate the day is, the better: not in an extream hot day, for making the horse to faint, nor yet when ỹ wind bloweth cold in the North, for that wil stop and hinder the working of the medicine, but rather in a temperate moist day, when ỹ wind is in ỹ South, if it may be, for that wil further and help the working of the medicine, and make the body lose, & soluble. Againe, for a horse, whether you purge him with pilles, or drink, it is best for him, as Martin saith, to take him in ỹ morning, after that he hath fasted from meate and drinke all the night before. And hauing receiued his medicine, let him be walked vp and down, one houre at the least, and then set vp, and suffered to stand on ỹ bit two or three houres, without any meate, but in the meane time see that he be well littered, and warme couered, and at the three houres end offer him a little of a warme mash made with wheat meale, or with bran, or else with ground mault. Giue him little meate or none, vntil he be purged, all which things haue bene shewed you before in diuerse places, and therfore I think it not good to be tedious vnto you with often recitall thereof.

## Of Cauterization, or giuing the fire, as well actuall as potentiall. Chap. Clxxxv.

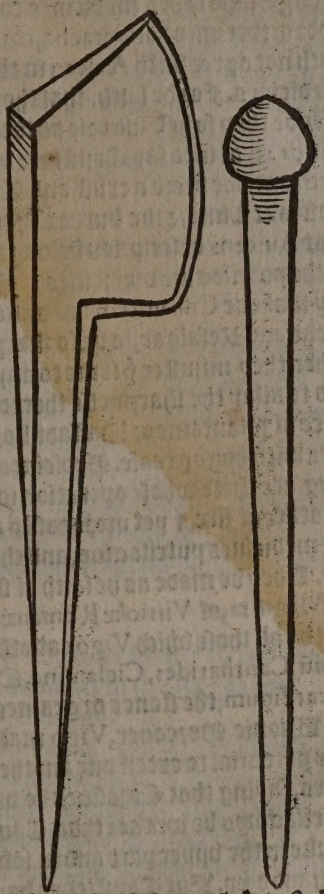
FOrsomuch as the fire is iudged of all the old writers to be be the chiefest remedie, and as it were the last refuge in all diseases almost whereunto a horse is subiect: I thought good therefore to talke of it in this place, and the rather, for that fewe or none of our Ferrers, vnlesse it be Martin, or such as he hath taught, doe knowe how to giue the fire, or to what end it serueth. But first you shall vnderstand that according to ỹ learned Chirurgians: yea, also according to my old authors, there be two kinds of Cauterie, the one actuall, and the other potentiall. The Cauterie actual is that which is done onely by fiering of ỹ grieued place wt a hot iron. The potentiall Cauterie is done by applying vnto the grieued place, some medicine corosiue, putrifactiue

trisactiue or causticke. But we will speak first of the actual cauterie, shewing you wherfore it is good, then of what metall and fashion your instruments should be made, and finallie, how, and when to vse them. Auicen saith, that an actuall Cauterie moderatelie vsed, is a noble remedie to stop corruption of mẽbers, to rectifie the complexion of ỹ same, and also to stanch blood. Howbeit you must beware (saith he) that you touch not the sinewes, chordes, or ligaments, least the member be weakened, or that ỹ crãpe insueth. Vegetius also writing of horseleachcraft praiseth the actuall cauterie verie much, speaking in this sort. The actual Cauterie (sayth he) bindeth together parts losened, it doth attenuate partes blowne, and puffed vp, it dryeth vp superfluous moisture, it loseneth, disperseth, and diuideth euil matter gathered together into knots, it asswageth old griefs, it rectifieth those parts of the body that are corrupted by any manner of way, reducing them to their pristine estate, and suffereth no superfluity to grow or increase: for the skin being opened wỹ a hote iron, all kind of corruption by vertue of ỹ fire is first digested, and ripened, & then dissolued, so as the matter doth issue out at the holes, wherby the member or part before offended, is now healed, and eased of all paine and griefe: yea, the holes being once closed, and cleane shut vp, that place is stronger and better knit together, and couered with a tougher skin, than euer it was before. Now as touching the instruments, wherof, & of what fashiõ they should be made, you shal vnderstand, that Vegetius, and the other olde writers would haue them to bee made of copper, praysing that metall to be far better to burne with, thã iron. The Chirurgiãs for mans body doe praise gold and siluer, but as for the fashion of the irons, it is to be referred to the kind of sore, and place grieued, wherewith you haue to deale, according to the diuersitie whereof, the instruments are to be made of diuerse fashions, as some like searing irons with sharpe edges, and some with blunt and broad edges, some like right, and som like crooked bodkins, some like hookes or sickles, and some with a great button, and some with a small button at the one end: in making wherof the Ferrers iudgment is most needful, who ought to be so skilful as he may be able to make al maner of irons that he should occupie

py, & to alter them accoꝛding as néd ſhal require. And therfoꝛe I thought good onely héere to ſet foꝛth the ſhape of the common dꝛawing iron, and of the button iron, like in foꝛme to thoſe that Martin vſeth, referring al ỹ reſt to your owne iudgment, & ſpecially, ſith you haue bin fully inſtructed befoꝛe, of what ſoꝛt they ſhould be made meét to ſerue your turne in any diſeaſe: now, as touching the vſe of the inſtruments, two things are ſpecially to be conſidered, that is, the heating of the iron, and the bearing of the hand. Foꝛ the back of the iron may not be red hot, but only ỹ edge, foꝛ feare of yéelding to much heat. And therfoꝛe though it be made red hot at the firſt, yet it ſhall be good beforе you occupy it, to cole the back of the inſtrument in water: & as touching ỹ bearing of the hand, the moꝛe euenly and lightly it is done the better, and that accoꝛding as the fineneſſe, and thinneſſe of ỹ ſkin ſhal require, which is to be iudged by the haire. Foꝛ if the haire be ſhoꝛt and fine, then it is a ſigne of a fine ſkin, if long and rough, then it betokeneth a thick ſkin. The fine ſkin requireth the lighter hand, and not to be burned ſo déepe as the thick ſkin, yet both muſt be burned vntill they looke yellow. But the fine ſkinne wil looke yellow with leſſer burning then the thick ſkin. Foꝛ the thick ſkin with his long haire doth choake the fire, and therfoꝛe requireth a moꝛe heauy hand, yea, and moꝛe often beating of the inſtrument than the thinne ſkin doth: and be ſure to dꝛaw alwaies with the haire, and not againſt the haire, in what foꝛme, & with what maner of lines hath bin taught you beforе: foꝛ thoſe muſt be made either long, ſhoꝛt, déepe, ſhallow, right, cꝛooked, oꝛ ouerthwart, accoꝛding as ỹ diſeaſe doth require: you haue learned alſo how to allay the heat of the fire, after ſuch dꝛawing. And therefoꝛe I haue no moꝛe to ſay here, but onely to admoniſh you, accoꝛding to Vegetius pꝛecepts, not to fire any ſinew place, noꝛ bone, that is bꝛoken, oꝛ out of ioint, foꝛ feare of weakning the whole member, noꝛ to bear ſo heauy oꝛ vneuen hand, as you ſhould thereby beforme, oꝛ miſſhape any part of the hoꝛſe, noꝛ to be too haſty in giuing ỹ fire, but to attempt firſt all other conuenient remedies, & when nothing els will help, to make the fire your laſt refuge, & yet not ſo much to neglect it, & abhoꝛre it, like the ignoꝛant ſoꝛt, as you wil not vſe it when néd

requi-

requireth, for lacke whereof many horses goe lame, and vncured of diuers diseases. Practise your selues therefore in giuing the fire at needefull-times with iudgement and discretion. So shall you doe it to the Horses benefite, and to your owne great praise & profit.



The drawing iron.

An iron with a button.

## Of Cauteries potential. Chap. clxxxvi.

CAuteries potentiall as Iohannes vigo sayeth are medicines Corrosiue, Putrifactiue, & Causticke. This worde Corrosiue, is derined of the latine word Corrodo, which is as much to say, as to gnawe and fret: and of such Corrosiues, some bee simple, and some compound. The simple, as Vigo saith, bee such as these bee, Roche Alum, as well burnt as not burnt; sponge of the sea somwhat burnt, Limeredde Cozall, powder of Mercurie. Compound corrosiues be these, Vnguentũ Apostolorum, Vnguentũ ægyptiacum, Vnguentũ ceraceum. Medicines putrifactiue called of ỹ learned sort Septica according to Auicen, be those that haue strength to corrupt ỹ complexion of ỹ member, and to induce any scarre like dead flesh, causing great paine: yea and feuers, & therefore ought not to be ministred, but

to

to strong bodies and in strong diseases, as in Carbuncles, Cankers, Vlcers, and such like, & they be these, Arsenicke sublimat, realgar, and other medicines compound therwith. Siluius also addeth therunto Sandaracha, chrysocollo, and Aconitū, but hée doth not agrée with Auicen in the description of ỳ putrifactiue medicines. For he saith, that they cause little paine or none, neither be they so hot and drie as those same that are called Escharotiça: that is to say Cruslitue: which bee hot in the fourth degrée, and doe breed a crust and scarre, and cause great paine: as vnsleaked Lime, & the burned dregs of wine: therfore it séemeth that Auicens description belongeth rather to the Cruslitue, than to the putrifactiue medicines. Notwithstanding, I must néeds say that our Chirurgians and also Ferrers, doe find both Arsenicke and Realgar, to be so sharpe, hot, and burning things, as when they minister ỳ same to any part of the body, they are forced to allay the sharpnesse thereof: the Chirurgians with the iuice of Plantaine or Daffadill, or else of Houseléeke, the Ferrers with hogs grease. Medicines Causlicke: that is to say, burning, are those whose operation is most strong, and inclineth to ỳ nature of fire, & yet more easily allaied as Vigo writeth, than the medicines putrifactiue, and therefore may be more safely vsed. They be made as he saith of strong lie, called Capitellum, or Magistra, of Vitriolæ Romanæ, Sal vitri, Aqua fortis, of this sort be all those which Vigo calleth the blistring medicines, as Apiū, Cantharides, Ciclamine, Onions, strong Garlike, Melanacardinum, the stones or graines of Vitis alba, otherwise called Bzionie. Moreouer, Vigo maketh euery one of these Cauteries potential to excell one another, as it were by certaine degrées, saying that Corosiues be weaker than putrifactiues, and putrifactiues be weaker than Causlicke, and therfore corosiues worke in the vpper part and in soft flesh, Putrifactiues in harde flesh and déep. But Causlickes haue power to breake the skinne in hard flesh and doe enter most déeply. The vse of the most part of which things hath bin taught you before in sundry places, according to Martins experience. And therfore I leaue to trouble you any further, wishing you ỳ are desirous to know any more of these matters, to read Taugantius writing De piroticis, the

eleuenth

eleuenth chapter, in his first book of Surgerie. And Syluius de medicamentorũ cõpositione. And Iohn Vigo writing of Surgerie englished but few yeares since. But ỹ old writers, so far as I can iudge by the words of Absirtus, Pelagonius, & others that write of horseleachcraft, doe apply this word Causticke, to such medicines as are astrictiue & binding, called of Martin and other Ferrers in these dayes, binding charges as may wel appear by the composition and vse thereof here following, recited by Vegetius in this sort.

The receipt of a Caustick vsed by *Chiron*, to dry vp superfluous moisture, and to bind partes loosened, and to strengthen parts weakened. Chap. clxxxvii.

TAke of Bitumen Iudaicum, two pound, of Bitumen Apolonii two pound, of the purest part of Frankincense sixe ounces, of Bedellium Arabicum two ounces, of Deeres sewet two pounde, of Propuleum two ounces, of Galbanum two ounces, of the dropps of Storax two ounces, of common ware two pound, of Resin Gabial one pound, of Viscus Italicus three ounces, of Apoxima two ounces, of ỹ iuice of hysop two ounces, of the dropps of Armoniacke two ounces, of Pitch one pound.

Another Caustick vsed by *Pelagonius*, to drie vp swellings, bladders, windgals, and splents in the legges and ioints. Chap. clxxxviii.

TAke virgin ware one pounde, of rosen two pound and a halfe, of Galbanum three ounces, of Asphaltum Iudaicum two pounde, of Myrrhe secondarie two pound, of Bitumen one pound, of Armoniacke sixe ounces, of Costus sixe ounces. Boile all these thinges together in an earthen pot, sauing the Asphaltum, Armoniack, & Costum: which being first ground like fine flower, must be added vnto ỹ other things, after that they haue bin boiled and cooled, & then boiled all together again and wel stirred so as they may be incorporated together, and made all one substance. These kinds of emplaisters or ointments ought in my iudgement to be called, as I said before, rather

rather binding charges, than Caustike medicines, because there be no such extream corrosiue, or burning simples in these, as are before recited. Notwithstanding, I refer my iudgement to those that be better learned, and so end, for feare of being ouer tedious. For, if I would, I could take very good occasion heere to speake of diuerse other medcines, whereof som are called Anodina, that is, easing paine and griefe. Martin calleth them Linoges: which are made of Linseed, Camamil, soft grease, and such like things as are hote in the first degree. Som again are called Narcotica, that is to say, astonying or bringing to sleepe, as those that are made of Opium, Mandragora, Popie, & such like cold and grosse thinges. And some are called Sarcotica, that is, breeding flesh, as Barlie flower, and Frankincense. And many other kinds of emplaisters, ointmentes, waters and salues, which would occupie a booke of no small volume, to bee written hereafter by some other perhappes, if not by my selfe. And in the meane time, let this that I have alreadie written suffice.

Heere endeth the order of curing Horses diseases: and now followeth the true Art of paring, and shooing all manner of Hooues.

The

# The true art of paring and shooing all manner of Hooues, togither with the shapes and figures of diuers shooes, very necessary for diuers Hooues.

## In what points the Art of shooing doth consist.

### The first Chapter.

THe art of shoing consisteth in these points, that is to say, in paring ỹ hoone wel, in making ỹ shoe of good stuffe, in wel fashioning the webbe thereof, and wel piercing the same, in fitting the shoe vnto ỹ horses foote, in making nailes of good stuffe, and well fashioning of the same, & finally, in wel driuing of ỹ said nailes, & clenching of the same. But sith neither paring nor shoing is an absolute thing of it self, but hath respect vnto ỹ foot, or hoone, (for ỹ shoe is to be fitted to the foote, & not the foot to the shoe) and that there be diuers kinds of hoones both good and bad, requiring great diuersitie as well of paring, as shoing: it is méet therefore that we talk first of the diuersitie of hoones, and then shew you how they ought to be pared and shod.

### Of hooues, and diuerse kindes thereof. Chap. 2.

OF hooues some be perfect, and some vnperfect. The perfect hoone is that which is round, smooth, tough, and short, so as the horse may tread more on the toe than on the heele, and also right, and somewhat hollowe within, but not ouer hollowe, hauing a narrow frush, and broad heeles. The vnperfect hoone is that which lacketh any of these properties aforesaid, belonging to a perfect hoone. For as touching the first point, if the hoone be not round but broad, and spreading out of the sides or quarters, that horse for the most part hath narrow heeles, and in continuance of time will bee flatte footed, which is

a weake foote, and will not carrie a shoe long, nor trauel far, but soone surbate, & by treading more on his héeles, than on his toes, will go low on his pasternes, and such feet through their weakenesse be much subiect to false quarters, & to go grauelling, which is most commonly seene in Flanders Horses, and such as bee bred in moist ground.

Brittle and rugged hooues.

Secondly, if the hoone be not smooth, but rugged, and full of circles like Rams hornes, then it is not only vnséemely to ỹ eie, but also it is a signe that the foote is in no good temper, but too hot and dre, and thereby perhappes maketh the hoone to be brittle, which defect is often seene in our English horses.

Long Hooues.

Thirdly, if it be long, then it will cause the horse to tread all vpon the héeles, and to go low on his pasternes, and thereby to bréed windgals, whereunto the Jennets of Spaine be much subiect by reason of their long hooues.

Crooked Hooues.

Fourthly, if the hoone be not right, but crooked, that is to say, broad without, & narrow within, whereby the horse is splaiwoted, then it will cause the horse to tread more inward, than outward, and to go too close with his ioints together, as hee cannot wel trauell without entertering, or perhaps striketh one leg so hard against another, as he becómeth lame. But if he be broad within, and narrowe without, that is not so hurtfull. Notwithstanding, it will cause him to graue l sooner on ỹ outside than on the inside.

Flatte Hooues.

Fiftly, if the hoone be flat and not hollow within, which is most commonly séene in Frezons and Flander Horses, then it brédeth such inconueniences, as are before declared in the first vnperfect hoone. And againe, if it be ouer hollow, then it wil dry the faster, and cause the horse to be hoonebound. For ỹ ouer hollow hoone is a straight narrow hoone, & groweth vpright, whereby, though ỹ horse treadeth vpright, & not on his héeles, yet such kinde of hoones will drie ouer fast, vnlesse they bee continually stopt, and cause the horse to be hoonebound, which lameth them, making them to halt, whereunto the Jennets & Barbary horses are much subiect.

Ouer hollow Hooues.

Broad Frushes.

Sirtly, if the frush be broad, then the héeles be weak, & so soft as you may almost bend them together, & then the horse will

neuer

neuer tread boldly on the stones, or hard ground.

Seuenthly, and lastly, if the heeles be narrowe, they be tender, and the horse wil grow to be houebound, to which defect the Jennets are most commonly subiect. Narrow heeles.

## Of paring the perfect hooue and forefeet. Chap. iii.

FIrst pare the seat of the shooe, so euen and plaine as may be, to the intent that the shooe may sit close, and not beare in one place more than in another, and take more of the toe than of the heele, to the intent that the heeles bee higher than the toe, because all the weight of the horses forebody lieth vpon the quarters and heeles of the forefeete. And therefore those partes should be most maintained, and taken off with the butter as little as may be. For the paring of the heeles, being naturallie thinner, and more tender than the toe, doth greatly weaken them: but the toe being naturally thicke and hard, would be pared so thinne almost as the edge of a knife. But in paring of the hinder feete, a cleane contrary order is to be obserued, as shal be said hereafter in his proper place, whereof ỹ French Ferrers haue a prouerbe, which saith, Deuant dariar, dariar deuant, in English before behind, behind before, that is to say, spare the forefoot behind, and ỹ hinder foot before, as wel in paring, as in pearcing the shooe.

## Of shooing the perfect hooue and forefeet, and how the shooe pearcing, and naile, should be made. Chap. iiii.

MAke your shooe of Spruse or Spanish iron, with a broad web, fitting it to the foote, and let the sponges be thicker and more substantiall than any other part of the shooe: yea, and also somewhat broad, so as the quarters on both sides may disbord, that is to say, appeare without the hooue a strawes bredth, to guard the coffin, which is the strength of the hooue, and only beareth the shooe: and when you come to the pearcing thereof, spare not to pearce it from the quarter to the hard toe, but not backwards toward the heele, & pearce it so, as the holes may be wider on the out side than on the inside, & that the circle of the pearcing may be more distant from the edge of ỹ toe than from the edge of the quarter, whereas it beginneth, because the

houe is thicker forward then backward, & therefore more hold to be taken. And as touching the nailes, then make them also of the same iron before sayd, the heades whereof would bee square and not fully so broad beneath as is aboue, but answerable to ỹ pearcing holes, as the head of the nailes may enter in and fil the same, appearing aboue the shoe no more than the breadth of the back of a knife, so shal they stand sure without shogging, & endure longer, & to that end the stamp that first maketh the holes, and the prescbil that pearceth them, and also the neckes of the nails, would be of one square fashion and bignesse, that is to say, great aboue, and smal beneath, which our common smithes do little regard: for when they pearse a shoe, they make ỹ holes as wide on the inside, as on the outside, and their nailes with so great a shouldering by driuing them ouer hard vppon the naile hole, as the heads or rather necke of the said nails, cannot enter into the holes, for to say the trueth, a good naile would haue no shouldering at al, but be made with a plain and square neck, so as it may fully fit and fill the pearcing hole of the shoe. For otherwise the head of the naile standing high, and the neck therof being weak, either it breaketh off, or else bendeth vpon every light occasion, so as ỹ shoe thereby standeth lose from the houe & is quickly lost. Moreouer, the shankes of the nailes would be somewhat flat, & the points sharp without hollownesse or flaw, & stiffer towards the head aboue, then beneath. And when you driue, driue at first with light strokes, & with a light hammer, til the naile be somwhat entered: and in shoing fine delicat horses, it shal not be amisse to grease the points of the naile with a little soft grease, that the nailes may enter the more easily, and driue the two talon nailes first. Then loke whether the shooe standeth right or not, which you shal perceiue in beholding the Frush, for if the spongs on both sides, be equally distant from the frush, then it standeth right, if not, then amend it and set the shoe right, and standing right, driue in another naile: that done, let the horse set downe his foot againe, and loke round about it to see whether it fitteth the horses foot in al places, and whether the horse treadeth euen and iust on it or not. And if you see that the shoe doth not furnish euery part equally, but perhapps ap-

peareth

shoe plaine: and as for the rest, pare it like the perfect houe.

## Of shooing the crooked hooue. Chap. 12.

MAke an indifferent strong shoe with a broad web, fitting it to the foot, and pearce it not vntill you haue laid the shoe vnto the foote, to the intent you may pearce it to the horses most commoditie, which shall bee doone if you pearce the scant side (which most commonly is the inside) more to wards the toe, thã the fuller or stronger side. And whereas the houe is weakest, there alwaies make the shoe strongest, and set on this shoe with nine nailes, that is to say, fiue on the stronger side, and foure on the weaker side.

## Of paring the flat hooue, otherwise called the pomised hooue. Chap. xiii.

MAke the seat of the shoe plain, and take some what off ẏ toe, but touch not the heele nor the ball of the foot, but leaue thẽ both so strong as you can.

## Of shooing the flat hooue, or pomised hooue. Chap. xiiii.

MAke this shoe with a very broad webbe, for the more it couers the weak sole, the better, and let the mid part of ẏ web that couers the ball of the foot be much thicker, than ẏ outsides where the pearcings bee, and let it be so hollowe as it touch no part of the ball of the foot, and let it be large ⁊ long inough in all places, so as the horse may goe at ease, and let it be pearsed roũd about the toe, to fauour the heeles, and make ten holes for ten nailes, that is to say fiue on each side.

## Of paring the hollow hooue. Chap. xv.

PAre this hooue round about, and specially the seat of ẏ shoe, that is to say round about by the edges, to the intent that the concauitie or hollownes of the hooue within may not be so deep, but more shallowe than it was before, and let it be alwaye kept moist with stopping it, for feare of houe binding, obseruing in your paring so euen a hand as may be, in all points like vnto ẏ perfect hooue.

Of shooing the ouer hollow hooue. Chap. 16.

MAke a light shooe in such order & forme, as was sayd before to serue the perfect hooue.

Of paring a hooue that hath a broad frush. Chap. 17.

BRoad Frushes do cause weak hèeles, and therfore had nède of little or no paring at all, and for that cause pare onely the toe, and also the seate of the shooe, so much as shal be nédful to ỹ euen standing of the shoe, leauing ỹ heeles so strong as may be.

Of shooing the hooue that hath a broad frush. Chap. 18.

MAke this shoe stronger towards the hèele than towards the toe, and also let the web be somwhat broad towards ỹ hèels to saue them from the ground, and set on this shoe with nine nailes, because most commonly it is a great foot, and in all other points make it like the shoe for the perfect hooue.

Of paring the hooue that hath narrow heeles. Chap. 19.

PAre the toe short, and make ỹ seat of the shoe faire and plain, and open onely so much, as there may be some little space betwixt the frush and the hèele. For the lesse you take off the hèele, the better.

Of shooing the hooue that hath narrow heeles. Chap. 20.

MAke a trim light shoe, with a broad web, & let the sponges be so broad as they may almost méete together, to defend the hèele from the ground, and pearce it all towards the toe, sparing the hèele so much as you can, and let the shooe bee long inough towards the heels, and set it on with eight nailes, like the shooe that fitteth the perfect hooue.

Of paring and shooing the hinder feet. Chap. 21.

HItherto we haue spoken of the paring and shooing of the foreféete, now therefore let vs speake somewhat of paring and shooing the hinder féete. For the paring of the hinder

féete,

fote, is cleane contrarie to the foreféete, for the weakeſt part of the hinder fote is the toe, and therfore in paring the hinder fot, the toe muſt be alwayes more ſpared than the heeles, but in all other points, obſerue ỹ order of paring, according to the perfection or imperfection of the hooues before declared.

## Of ſhooing the hinder feete. Chap. 22.

MAke the ſhoe fit for the hoone in ſuch ſorte as is before ſayde, ſauing that it would be alwayes ſtrongeſt towards the toe, and it muſt bee pearced nigher the heele than the toe: becauſe, as I haue ſayde before, that the toe is allwaies the weakeſt part of the hinder fote. And alſo let the outſide of the hinder ſhooe bee made with a Calkin, not ouer highe, but let the other ſponge be agreeable vnto the Calkin, that is to ſay, as high in a manner as the Calkin, which Calkin is to kéepe the horſe from ſliding. But then it may not bee ſharpe pointed, but rather flat and handſomely turned vpwarde, as is preſented in the figure of hinder ſhoes hereafter following: which kinde of Calkin is named by Cæſar Fiaſchi in his booke of riding, Rápone alla Ragoneſa, who vtterly reiected al other kinds of calkins as things hurtful and vnprofitable, as we ſhal ſhew you hereafter when we come to ſpeake of ſhooes with Calkins, Rings, & ſuch like engins.

## Of ſhooing the hoone that hath a falſe quarter. Chap. 23.

IF the horſe halt, then make him a ſhooe fitted to his fote, lacking one quarter on that ſide that his falſe quarter is, in ſuch forme as you ſhal ſee in the ende of this booke. If he doe not halt, then make him a ſhooe with a button, or ſhoulder ing on ỹ inſide of the ſhooe, and next to the ſole of the fot, ſomewhat diſtant from the falſe quarter towards the toe, in ſuch forme as you ſhal haue in the end of this booke, and that ſhal defend ỹ ſore place, ſo as the ſhooe ſhal not touch it. And let it bee pearced like vnto the figure hereafter expreſſed, and with this kind of ſhoe, you may boldly trauel your horſe where you wil.

## Of paring and shooing for enterfering. Chap. 24.

THose Hoowes that enterfere, are most commonly higher on the outside than on the inside, and therfore the outside would be the more taken off with ỳ butter, to the intent that the inside may be somwhat higher (if it wil be) than ỳ outside: & then make him a shoe fit for his foot, which would bee thicker on the inside than on the outside, & let that shoe neuer haue any Calkin, for that wil make the horse to tread awry, and ỳ sooner to enterfere, and let it be pearced in such sort, as you see ỳ figure hereafter expressed: but to be sure, first cause the horse to be ridden before you, and marke wel where he toucheth most, and there remedy the shoe, by making it the streighter in that place.

## Of paring and shooing the foot that is hoouebound. Chap. 25.

FIrst pare his toe so short as may be, and pare the sole somewhat thin, and open the heeles wel, and make him a half shoo like a halfe moone, fashioning and pearcing it like vnto ỳ figure hereafter expressed.

## Of making the planch shooe, or pancelet. Chap. 26.

THe planch maketh a good foot, and euil leg, because it maketh the foot to grow beyond the measure of the leg. Notwithstãding, for a weak heele it is maruellous good, & it will last longer than any shooe, & it is borrowed from ỳ Moile, that hath weak heeles & crushes, to kẽp ỳ foot from stones & grauel. Notwithstanding, woe bee vnto that horse that hath nẽd of such a shooe. The figure of this shooe is also in the end of this booke.

## Of shooes with Calkins, rings, welts, and turning vices, and of the Paten shooe. Chap. 27.

BEsides all these kindes of shoes before recited, there bee diuerse others, whereof some are made high with Calkinnes, some with ringes, some with welles or borders about, and some with vices, som with the toes turned vpwarde, some with the heeles turned vpwarde, and of manie

other

other sashiõs, which though they be not so needful, yet I thought good to speak somwhat of them, and also to set forth som of their shapes. And first, as touching shooes with Calkins, Cesar Fiaschi saith that though such Calkins be made to kéepe the horse from sliding, yet they doe the horse more harm than good, in that the horse by means therof cannot tread euenly vpon ỹ ground, wherby he many times wrincheth his foote, or straineth some sinew, and specially when he trauaileth in stony places, and on the mountaines, whereas the hardnes of the stones perhaps not suffering the Calkins to catch sure hold, the hot slippeth with ỹ more violent stresse, and so taketh harme, and specially the héele, if it be weake. And therefore to trauell on the mountaines, he prayseth much the Turkie maner of shooing, which for that purpose make their horses shooes with ỹ héeles turned vpward, in such sort as you see the planch made, setting them on with nails hauing heads with little buttõs, but not standing so high aboue the shoe as our frost nailes commonly doe, whereby the horse treadeth euenly and surely, so shal he not doe hauing Calkins: which besides ỹ discommodities before alledged, be very dangerous at anie time that you would manege your horse. For by crossing in his turning, one foot perhaps may hurt another with the Calkin, so as it may make the horse to halt: yea, and perhaps lame him for euer. And besides that, the calkins being high behind, ỹ hoone cãnot be pared so much before at ỹ toe, as it ought to be, whereby the horse treadeth lower on his hœles, then hee should doe, being wel pared and shodde without Calkins, and so becommeth weake héeled. Notwithstanding, some neuer think their horses to be wel shodde, vnlesse al ỹ shooes bee made with Calkins, either single or double: yet of two euils double is the lesse. For the horse shal tread euener with double, than with single Calkins. But then such Calkins would not be euer long or sharpe pointed, but rather short and flat, as hath beene before taught, and is expressed in the figure of hinder shooes hereafter following: which, as I sayd before, Cesar Fiaschi calleth Ramponi alla Ragonesa. Thus much of shooes with Calkins.

Of

Of shooes with rings. Chap. 28.

Shoes with rings were first inuented to make a horse lift his feet high: but Cæsar Fiaschi saith, that such shooes be more painefull than helpefull to the horse, and in wearing such shooes hee lifteth more for paine and griefe, and specially being trotted vpon a hard ground, thã for any pleasure or good that they do him, which thing is incident to many horses that haue not sound hooues. For though they be well shoode, and haue no rings at all, yet being trotted vpon a hard ground, they will lift higher thã vpon a soft ground: for hauing tender hooues, they be afeard to touch ẏ hard grouñd euen like a man that hath some griefe in the sole of his foote, which will rather twitch vp his leg, then offend the sore place, by setting it to the ground. And if that man should weare a straight shoe, it would greeue him the worse. Euen so it fareth with ẏ horse, which perhaps hauing naturally tender heeles, som for lacke of discretion, doe adde thereunto also high Calkins, or els rings, ẏ therby cause him to haue weaker heeles then he had before. Wherfore leauing aside such vnprofitable deuises, I would wish you to make all your shoes, and specially your forefhoes, with sponges, in such order as hath been before taught. And as for making the horse to lift his feete, that is to be holpen chiefly by the Art and skill of the Rider. And whilest ẏ horse is in schooling, I thinke it were not amisse, to let him weare continually very heauy shoes, to ẏ intent that being afterward shod with lighter shoes, when he shold be maneged to the shew, or otherwise trauelled, he may feele his feet to be lighter, and therby he shall lift the higher, and moue his legges and shoulders with the more pleasure and better grace.

Of shooes with swelling welter, or borders about. Chap. 29.

IN Germanie and high Almaine, the Smithes doe make their shooes with a swelling welt round about the shooe, which being as highe as the heades of the nailes, or rather higher, doe saue the nayles from wearing, which kinde of shoe for lasting, I must needes praise. For I my self haue trauelled, my horse being shod with those shoes, in those countries aboue fiue hundred miles right out, vpon verie stony ground:

yea,

yea, and vpon the mountaines, without remouing shoe, or driuing naile. For the shooe being made of well tempered stuffe, weareth equally in all parts, and the horse also treadeth euenlie vpon them, and specially his foot being before wel pared. Cæsar Fiaschi praiseth also this shoe very much, to be vsed when a horse should runne for a wager, to keep him from sliding. But then he would haue the welt to be inuented, hauing sharpe pointed teeth like a sawe, and that the sponges behind be as thick as the welt, and that the welt be of a tough hard temper, for fear of wearing ouer fast. And if you list to hollow the said shooe in the midst, yet let not the inbolled side rise so high as the welt, but lie somwhat lower. With these kinde of shoes they vse in Italie to shooe such Barbarie horses, Iennets, and Turks, as are appointed to run for y best game, at some publique triumph, or for any other priuate wager. And therfore sith this kind of shoe is so good to keep horses from sliding, Cæsar Fiaschi thinketh it best to be vsed to that end; vtterly disallowing both calkins, frost nailes, crests, spurs, & all such like deuises, as are often vsed by the ignorant sort, to keepe their horses from sliding, not considering y great discommodity and hurt that may redound therof to the horse, by meanes that he cannot tread euen vpon the ground. Or in the stead of this shoe, they may vse the turky shoe, & button nailes before mentioned, and that shal keep their horses from sliding, better than any of the other deuises, and with lesse harme to the horse.

## Of shooes with turning vices, and also of ioint shooes. Chap. 30.

SOme that vse to passe the mountaines where smithes are not readily to bee found to shooe a horse, if neede bee, doe carry about with them certaine shooes made with vices, wherewith they make the shooe fast to the horses foote, without helpe of hammer or naile, the shape wherof is hereafter expressed. Notwithstanding such shooes are more for the shewe, than for any good vse or commoditie. For though it saue the horses foot from stones, yet it so pincheth his hoofe, as he goeth with paine, and perhappes doth his hoofe more hurt than the stones would do. And therefore it were better in such needful times to

vse

vse the ioint shoe, which is made of two péces, with a flat riuet naile, ioyning thē together in the toe, so as you may make it both wide and narrow, as you wil your selfe to serue any sote, but this shoe must be set on with nailes, and therfore it is néedful that the rider learne to driue a naile if néd be, wherfore he must haue alwaies store about him together with hammer, pinsons, & butter, handsomly made and mét for cariage, without ỹ which the horsmen of Almanie do neuer trauel, neither is there any gentleman that loueth his horse, but can vse those instruments, for that purpose, as wel as any smith. Cæsar Fiaschi calleth these kinds of shoes Disferre, praysing them very much to bee vsed to such purpose, as is before said, & so doth Martin. And therefore I thought good to set out the shape thereof amongst the rest of the figures of shoes.

## Of the paten shooe. Chap. 31.

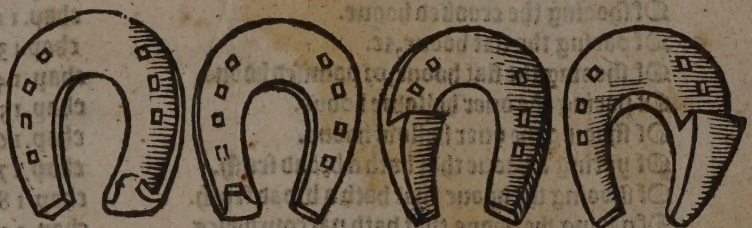
BEcause euery smith knoweth the vse of the shoe, and how to make it, I shal not néd to vse many words, but only shewe you that it is a necessary shoe for a horse that is hurt in the hip or stifle, to be put on vpon the contrary foot, to the intent that the sore leg may hang, and not touch the ground.

## How to keep the hooues of a horse moist in the stable. Cha. 32.

AS horses hooues doe many times take harme thorough the negligence or vnskilfulnes of the Ferrer, in euill paring or shooing of the same: euen so they take no lesse harme many times through the negligence of the keeper for lacke of stopping and keeping the forefeete moist, for the hinder féete most commonly are kept too moist, by meanes that the doong and stale is suffered to lie continually at their héeles. But ỹ forefeet stand continually drie, whereby the horse becommeth brittle hooued: yea, & many times hooue bound, which a good keeper wil not suffer, but be mindful to stop them often, either with Horse doung or cowe doung: yea, and also to wash them cleane without with water, and then to annoint them with some good suppling ointmēt, as this here following prescribed by Martin, which wil not only supple ỹ hooues and make them tough, but also cause

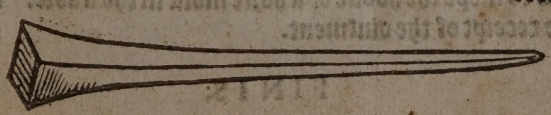
them

The Planch for weake heeles. Fore-ſhooes for enterfering.



Hinder ſhooes for perfect hooues. Hinder ſhooes for interfering.

A ſhooe with a vice. A ioint ſhooe to widen and ſtraiten at pleaſure. A ſhooe with a welt or border. A ſhooe with ringes to make a horſe lift his feete.



The true ſhape of a perfect horſeſhooe naile.

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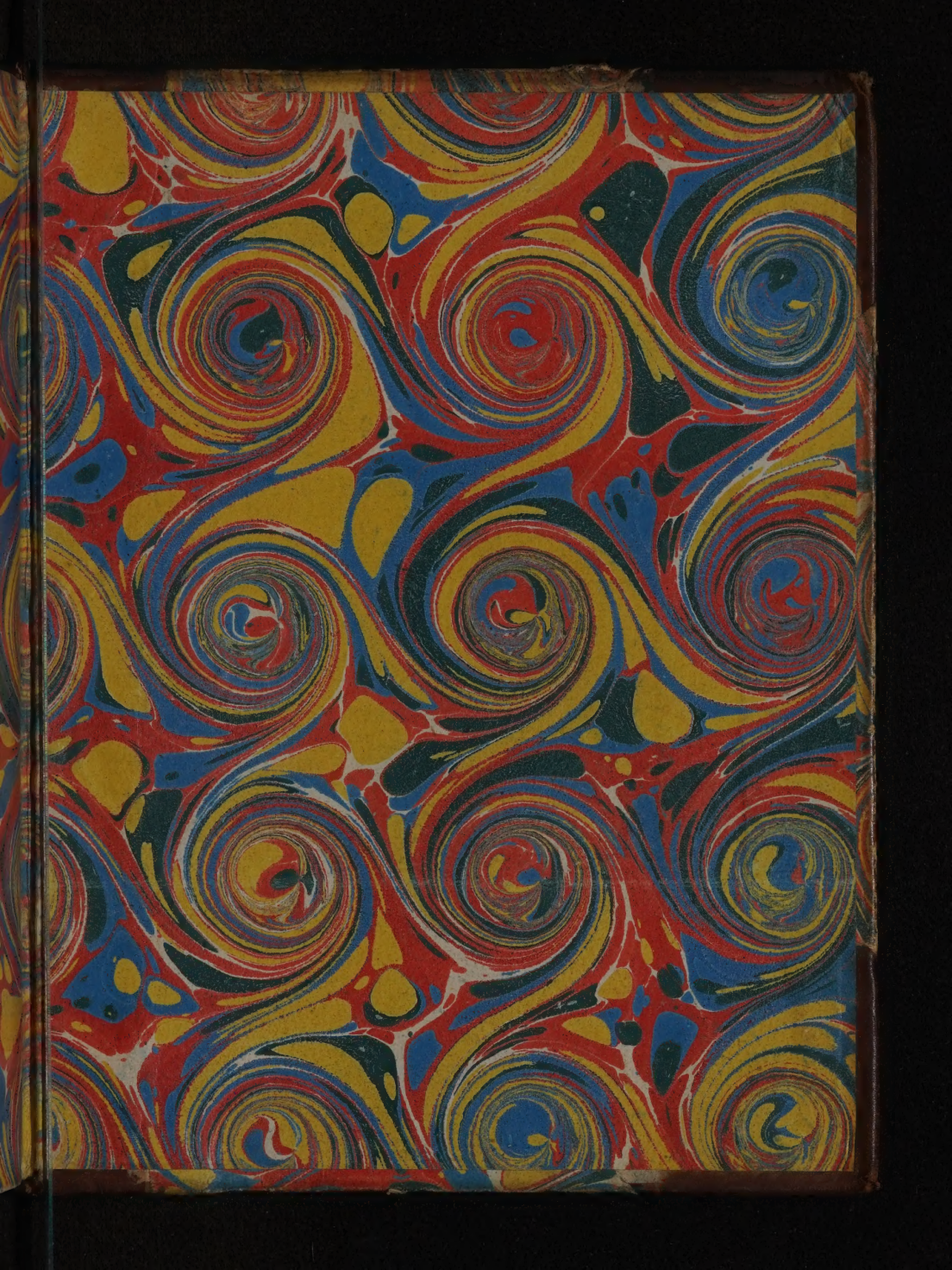
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